

NATIONAL  
BANK OF  
ROMANIA

# Inflation Report

May 2018

Year XIV, No. 52

# Inflation Report

## May 2018

## **NOTE**

Some of the data are still provisional and will be updated as appropriate in the subsequent issues.

The source of statistical data used in charts and tables was mentioned only when they were provided by other institutions.

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ISSN 1582-2931 (print)  
ISSN 1584-0948 (online)  
ISSN 1584-0948 (e-Pub)

# Foreword

The primary objective of the National Bank of Romania is to ensure and maintain price stability, with monetary policy being implemented under inflation targeting starting August 2005. In this context, active communication of the monetary authority to the public at large plays a key role, and the major tool that the central bank uses to this end is the *Inflation Report*.

Apart from analysing the most recent economic, monetary and financial developments and explaining the rationale and the manner of implementing monetary policy in the previous period, the *Report* includes the National Bank of Romania's quarterly projection on inflation over an eight-quarter horizon, including the associated uncertainties and risks, and a policy assessment built upon the recent and future macroeconomic context from the perspective of the monetary policy decision.

By drafting and publishing the *Inflation Report* on a quarterly basis, in accordance with the frequency of the forecasting cycle, the National Bank of Romania aims to provide all those interested with the opportunity of best comprehending its analytical framework and hence the reasons underlying the monetary policy decisions. Securing a transparent and predictable monetary policy is meant to strengthen monetary policy credibility and thus help achieve an effective anchoring of inflation expectations and lower the costs associated with ensuring and maintaining price stability.

The analysis in the *Inflation Report* is based upon the most recent statistical data available at the date of drafting the *Report*, so that the reference periods of indicators herein may vary.

The *Inflation Report* was approved by the NBR Board in its meeting of 7 May 2018 and the cut-off date for the data underlying the macroeconomic projection was 2 May 2018.

All issues of this publication are available in hard copy, as well as on the NBR website at <http://www.bnr.ro>.



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# Summary

## Developments in inflation and its determinants

The annual CPI inflation rate continued on an upward trend in 2018 Q1 to 4.95 percent in March, above the upper bound of the  $\pm 1$  percentage point variation band around the 2.5 percent flat target, but in line with the forecast in the previous *Inflation Report*. Out of the 1.6 percentage point advance reported in March 2018 versus end-2017, 1 percentage point was attributed to the fading-out of the statistical effects on the annual CPI inflation rate, associated with the change in indirect taxes and the scrapping of some non-tax fees and charges in early 2017. Adding to these were price increases in the period under review reflected by several exogenous CPI components (the largest hikes being reported for electricity and natural gas that made a 0.5 percentage point contribution) and core inflation. In its turn, the average annual HICP inflation rate went up markedly to 1.9 percent in March 2018, standing 0.8 percentage points higher than in December 2017.

The annual CPI inflation rate at constant taxes<sup>1</sup> stepped up further from 4.1 percent in December 2017 to 4.7 percent in March 2018. The deterioration posted in this quarter is, however, lower than that in the previous 3-month period, when numerous adverse supply-side shocks had been at play.

In March 2018, the annual adjusted CORE2 inflation reached 3 percent, rising by 0.5 percentage points versus December 2017 and by 0.4 percentage points when calculated net of the VAT effect. At end-Q1, the indicator stood 0.2 percentage points above the projection in the previous *Inflation Report*, primarily on account of the dynamics of the leu exchange rate in this quarter. The evolution also reflected the action of its fundamental drivers, namely the pick-up in excess demand in the economy, the persistence of pressures via the production costs of firms, as well as economic agents' higher inflation expectations. Moreover, additional inflationary pressures stem from the movements in the leu exchange rate, with an impact on both prices of imported consumer goods and some services prices to which add the effects caused by the developments in the international energy prices that recorded new increases in the course of the quarter.

The annual dynamics of unit labour costs economy-wide rose in 2017 Q4 to 12.5 percent compared to 8.5 percent in Q3, largely on account of the advance in the compensation of employees; albeit at a slightly slower pace, labour productivity growth continued to be brisk, remaining close to the values recorded over the last two years. At the same time, the annual growth rate of unit wage costs in industry

<sup>1</sup> It excludes the estimated impact of changes in the VAT rate, excise duties and some non-tax fees and charges.

moderated in October 2017 – February 2018 compared to Q3, amid larger labour productivity gains, but the annual rates reported by the consumer goods industries continued to significantly exceed the average.

## **Monetary policy since the release of the previous *Inflation Report***

In its meeting of 7 February 2018, the NBR Board decided to raise the monetary policy rate to 2.25 percent per annum from 2 percent per annum. Moreover, the Board decided to increase the deposit facility rate and the lending facility rate to 1.25 percent per annum and 3.25 percent per annum respectively. The annual inflation rate went up in December 2017 to 3.32 percent from 3.23 percent in November, remaining inside the variation band of the flat target, while running higher than the forecast. At the same time, the new baseline scenario of the forecast highlighted the prospects for inflation to pick up significantly in the short run and subsequently to slow down starting with 2018 Q4. Compared to the November 2017 *Inflation Report*, the trajectory of the forecasted annual CPI inflation rate was revised upwards in the short run, mainly following the relative step-up in the recent and anticipated inflationary effects from supply-side factors, as well as amid pressures from fundamentals.

The uncertainties and risks surrounding the projection stemmed from both the domestic and the external environment. On the domestic front, they were mainly associated with the fiscal and income policy conduct, labour market conditions and administered price developments. On the external front, further relevant were the uncertainties and risks related to the volatility of international financial markets, the developments in the oil prices and the prices of agri-food products, as well as to the pace of economic expansion in the euro area and globally, inter alia amid the normalisation of the monetary policy stances of the major central banks.

Subsequently, the statistical data confirmed the significant increase in the annual inflation rate in January 2018 to 4.32 percent, followed by a new advance to 4.72 percent in February, slightly below the forecast. The pick-up in inflation rate was mainly ascribable to factors beyond the monetary policy scope, namely the base effects stemming from the cuts in indirect taxes and the scrapping of a number of non-tax fees and charges in early 2017, as well as the recent hikes in the prices of electricity, heating, natural gas and fuels. In its turn, the annual adjusted CORE2 inflation rate posted a faster pick-up to reach 2.8 percent in January and 2.9 percent in February 2018, from 2.4 percent in December 2017. The advance reflected the progressive build-up of demand-pull and cost-push inflationary pressures, as well as the influences of the leu exchange rate impacting primarily the services prices. The economic growth saw a deceleration in 2017 Q4, as expected, its 6.9 percent annual rate remaining robust nevertheless. The main driver of economic growth was further household consumption, making, however, a lower contribution thereto, while an increasing positive contribution had gross fixed capital formation, which posted the highest level since 2015. By contrast, net exports made a larger negative contribution to GDP growth.

In the NBR Board meeting of 4 April 2018, the latest assessments reconfirmed the prospects for the annual inflation rate to level off above the variation band of the target on the very short time horizon and return to the upper bound of the variation band towards the end of the current year, in line with the February 2018 medium-term forecast. The assessment was further surrounded by heightened risks and uncertainties related mainly to administered prices and volatile prices, as well as to the fiscal policy stance and labour market conditions. The risks and uncertainties arising from the evolution of the economy and inflation developments in the euro area and, implicitly, from the monetary policy stance of the ECB and of the central banks in the region were also relevant.

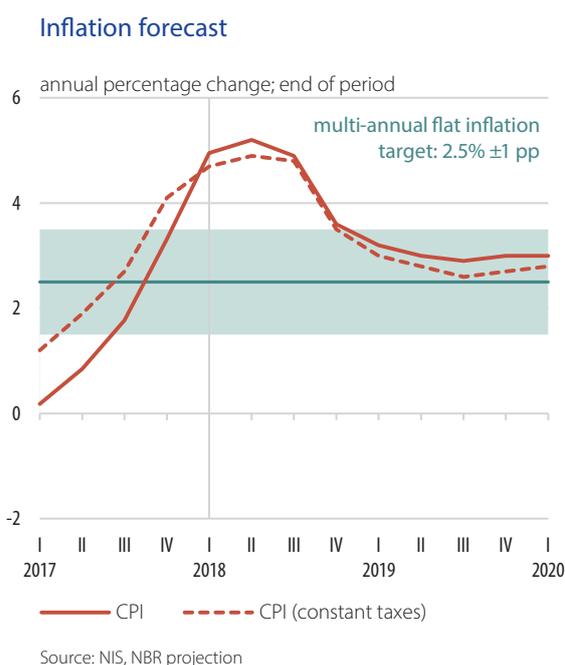
Based on the data available at that time and in the context of the identified risks and uncertainties, the NBR Board decided to keep the monetary policy rate at 2.25 percent per annum. The NBR Board's decisions are aimed at ensuring and maintaining price stability over the medium term in a manner conducive to achieving sustainable economic growth and amid preserving macroeconomic stability.

## Inflation outlook

The annual CPI inflation rate is projected to reach 3.6 percent at the end of 2018 and 3.0 percent at the end of 2019. Compared to the February 2018 *Inflation Report*, the projected values were revised marginally, i.e. upwards by 0.1 percentage points for the end of this year and downwards by 0.1 percentage points for the end of next year. Similarly to the previous projection, the annual dynamics of the index is expected to hover around 5 percent in 2018 Q2 and Q3, with the slight upward revisions of the values forecasted for these periods being associated with some exogenous components of the CPI basket (mainly tobacco products and volatile food prices). Given the fading-out in early 2018 of the impact of changes in indirect taxes and a number of non-tax fees and charges implemented during 2017, the annual

inflation rate at constant taxes will run below 5 percent over 2018, slowing down at a pace similar to that anticipated for the CPI in Q4 and reaching 3.5 percent at the end of this year. For end-2019, this indicator is projected at 2.7 percent.

The baseline scenario of the projection envisages a gradual deceleration in economic growth in 2018 and 2019, compared to the high level of 2017. Over the projection interval, real GDP dynamics will reflect those of domestic demand, the slowdown being chiefly ascribable to private consumption, amid the anticipated evolution of households' real disposable income. At the same time, gross fixed capital formation is projected to further recover in both the private and the public sectors, yet the component's path is contingent upon the pace of absorption of EU structural and investment funds, which is seen improving over the coming years.



The contribution from net exports will remain negative, and widen during 2018 from a year earlier, before narrowing in 2019. Under the circumstances, the current account deficit will open to nearly 4 percent of GDP over the medium term, marking a larger divergence between the value of this indicator in Romania and those in other emerging economies across the region, which carries the potential to bear upon the macroeconomic equilibria. External deficit financing is envisaged to be covered by stable, non-debt-creating capital inflows, but the projection shows that their share in nominal GDP is stuck at levels lower than those reported from 2013 to 2016, owing mostly to the still early stage of absorption of EU structural and investment funds under the 2014-2020 Multiannual Financial Framework.

The output gap is projected for this year at values remaining close to those of 2017, but narrower for 2019, amid the reconfiguration of real broad monetary conditions to close-to-neutral values at this horizon. Compared to the previous *Inflation Report*, excess demand was revised downwards in 2017, which also results in lower levels of this variable over the projection interval (for further details, see Box 2).

The annual adjusted CORE2 inflation rate is forecasted to reach 3.2 percent at the end of 2018 and 3.4 percent at the end of next year. Throughout the projection interval, core inflation is expected to stay on the upward path it followed last year and early this year. The projected levels are lower than those published in the previous *Inflation Report*, amid weaker inflationary pressures from the revision of excess demand and import prices, whereas economic agents' inflation expectations are higher over most of the projection interval. Given that in recent years the expansion in consumption has been covered to a larger extent by imports than by domestically-produced goods, the external environment will continue to put pressure on domestic core inflation, albeit of low intensity, as the projected inflation rate in Romania's main trading partners remains below 2 percent.

Inflation components beyond the monetary policy scope are seen to make a cumulative contribution to the annual CPI inflation rate of 1.6 percentage points for the end of 2018 and 0.9 percentage points for the end of 2019. The values projected are similar to those published in the previous *Inflation Report*, while the deceleration in the contribution from these components to the annual inflation rate over the forecast interval reflects the gradual fading-out of supply-side shocks or of administrative decisions weighing on their dynamics in the course of last and this year. The breakdown shows that the rates of increase of tobacco product prices and volatile food prices were more significantly revised upwards, particularly for 2018, while for the end of 2019 all exogenous components, except the tobacco product price inflation, are anticipated to post marginally lower values than those projected previously.

The monetary policy stance is shaped with a view to ensuring and maintaining price stability over the medium term, in a manner conducive to achieving sustainable economic growth and preserving macroeconomic stability.

The balance of risks to the annual inflation rate projection is assessed as being tilted to the upside compared to its path in the baseline scenario. Relevant risks come chiefly from the relatively high degree of labour market tightness, affecting the evolution of the wage-productivity gap in the private sector, and from the dynamics of international energy prices. The latter are highly relevant for both local companies' production costs and some CPI basket components. Overall, the external environment is deemed to have a neutral impact on this balance.

Domestically, the risks of upward deviations in the projected inflation rate relate mainly to the elevated level of labour market tightness, which may additionally fuel the excess aggregate demand. In this context, the additional income partially channelled towards imports of goods and services might lead to a wider external imbalance. Under such a scenario, inflationary pressures coming via both direct channels (the increase in aggregate demand and production costs) and the indirect channel (offsetting effects triggered by the repositioning of the leu exchange rate) could imply upward deviations of the annual inflation rate from the values projected in the baseline scenario.

The risks associated with the fiscal and income policy stance are assessed as being balanced. Nevertheless, it remains desirable to preserve a balance between the fiscal and income measures aimed at underpinning aggregate demand and the measures meant to enhance the economy's productive capacity in order to avoid the build-up of additional economy-wide inflationary pressures and the fuelling of the output gap, which would lead to further departures from fulfilling the structural deficit objective.

From a broader perspective, the consistent implementation of a balanced macroeconomic policy mix is called for, as it is deemed essential to ensure lasting and sustainable economic growth, without prejudice to the objective of price stability.

On the external front, on the one hand, stronger global economic growth, also in the context of the fiscal stimulus implemented by the US Administration, might give another boost to investment and international trade. On the other hand, increased trade protectionism and a possible tightening of global financial conditions, amid the monetary policy stances pursued by the major central banks, might have opposite effects. Against this background, the developments relating to Brexit continue to be highly relevant, their monitoring focusing on the potential consequences on the global macroeconomic coordinates, in an environment characterised by heightening geopolitical tensions.

Turning to volatile food prices, inherent uncertainties persist about the weather conditions that carry the potential to influence the agricultural produce supply in both ways. Relatively balanced risks to inflation, conditional on the information available so far, stem from administered prices. However, the uncertainty surrounding the impact that the natural gas and electricity market deregulation will exert on end-user prices remains relevant.

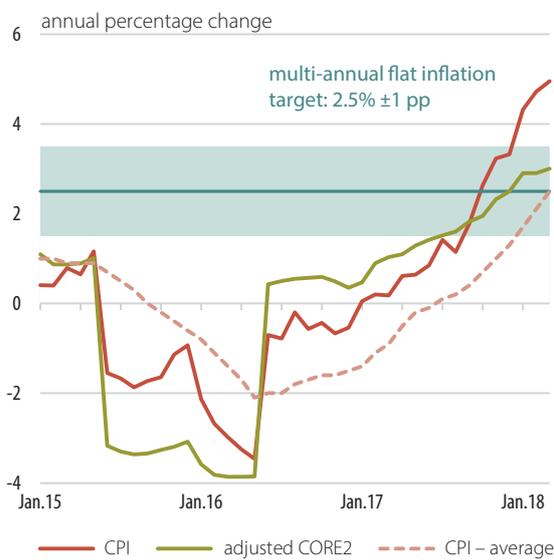
## Monetary policy decision

In view of the outlook for a slight pick-up and a levelling-off of the annual inflation rate over several months at values above the upper bound of the variation band of the target, under the impact of supply-side factors as well as of rising inflationary pressures from fundamental drivers, entailing also the risk of de-anchoring medium-term inflation expectations, the Board of the National Bank of Romania decided, in its meeting of 7 May 2018, to increase the monetary policy rate by 0.25 percentage points to 2.50 percent. Moreover, the deposit facility rate was raised by 0.25 percentage points to 1.50 percent and the lending (Lombard) facility rate was added 0.25 percentage points to 3.50 percent. In addition, the NBR Board decided to maintain the existing levels of minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions.

# 1. Inflation developments

The annual CPI inflation rate continued on an upward trend in 2018 Q1, standing at 4.95 percent in March, up 1.6 percentage points from end-2017, i.e. above the upper bound of the  $\pm 1$  percentage point variation band around the 2.5 percent flat target. More than half of the increase versus December 2017 was due to the fading-out of the statistical effect associated with the changes made at the beginning of 2017 in indirect taxation and the scrapping of some non-tax fees and charges. Looking at current developments, a significant contribution to the swifter growth rate of consumer prices in the first part of 2018 came from the hike in some administered prices, i.e. the prices for electricity and natural gas. Adding to these were the inflationary pressures stemming from the opening of the positive output gap, higher production costs, the upward adjustment of inflation expectations, as well as from the depreciation trend of the domestic currency versus the euro. Against this background, the annual adjusted CORE2 inflation rate went up to 3 percent in March 2018, i.e. 0.5 percentage points above the level reached at end-2017 (Chart 1.1).

Chart 1.1. Inflation developments



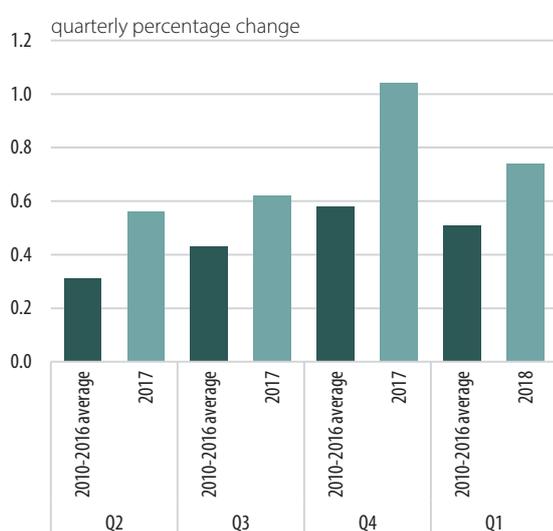
Source: NIS, NBR

After three years of benign developments, due, to a large extent, to the successive changes in indirect taxation, the annual CPI inflation rate increased in the first three months of 2018 by 1.6 percentage points (up to 4.95 percent in March). A 1 percentage point contribution to this leap came from the base effect associated with the measures implemented in January and February 2017, namely the cut in standard VAT rate from 20 percent to 19 percent, the removal of the special excise duty on motor fuels, the scrapping of some non-tax fees and charges. This essentially reflects the fact that, throughout 2017, the annual inflation rates were dampened by the disinflationary impact of the above-mentioned fiscal easing measures, which concealed the monthly increases in consumer prices over the entire period. Referring to an inflation measure calculated at constant taxes, the deterioration in the annual inflation

rate was weaker in 2018 Q1 than that in the previous three months, which had been fraught by a cluster of adverse supply-side shocks (or the like) – the hike in Brent oil prices, in the electricity price, the reintroduction of the special excise duty on fuels, severe shortfalls at European level for some food items (eggs, butter) –, whose inflationary impact will be seen in the annual dynamics of consumer prices in 2018 Q2 and Q3 as well.

Beyond the statistical influence, the faster annual growth of consumer prices in the first part of 2018 is determined by current pressures from some exogenous variables and core inflation. Relevant for the first category are administered prices, especially the energy group<sup>2</sup>. Specifically, January saw a new rise in electricity prices (by 2.3 percent), solely ascribable to the completion of the last stage of market liberalisation, the annual dynamics thus reaching 18.2 percent in March, after four consecutive quarters of stepping-up. Natural gas prices also witnessed an increase in January (up 5.6 percent), which, according to the regulatory authority, was justified by the developments on the free market throughout 2017. In this case as well, the annual growth rate of prices for end-users was, at the end of 2018 Q1, significantly higher than the aggregate measure, exceeding 8 percent.

Chart 1.2. Adjusted CORE2 inflation\*



\*) excluding the direct effects of VAT rate changes

Source: NIS, NBR estimates and calculations

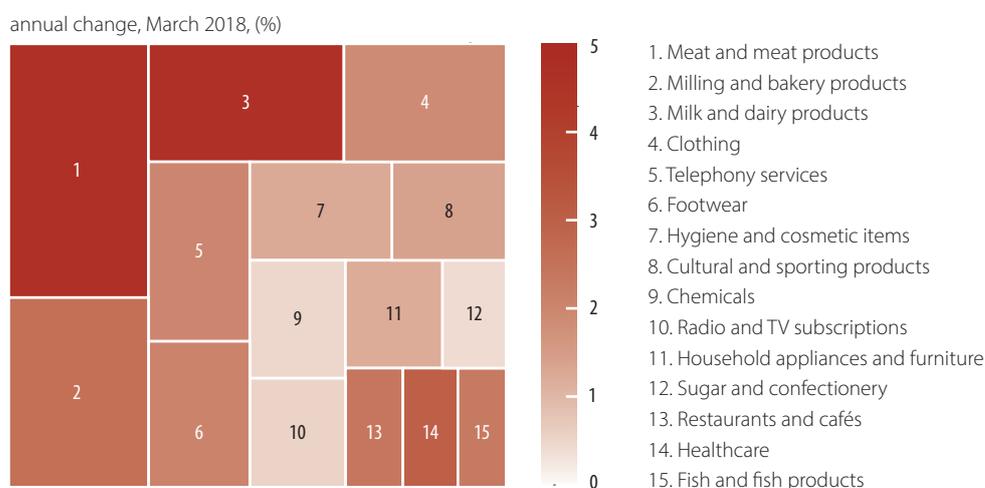
A similar contribution to the upward path of the annual CPI inflation rate came from the adjusted CORE2 index, whose annual dynamics (excluding the direct effect of the VAT rate cut) stepped up from December 2017 by 0.4 percentage points, standing at 3 percent in March. The significant pace of increase follows the trend observed starting with 2017 Q2, the slight easing compared with the previous quarter reflecting seasonal influences and the overcoming of some supply-side shocks rather than a weaker action of fundamentals. The widening of the positive output gap and the persistent pressures on production costs of firms from the upward trend of energy prices and from the robust wage growth, fuelled primarily by labour market tightness, remained distinct characteristics of the economic environment, leaving their mark on the price setting behaviour of companies. The increase in the quarterly rate of core inflation at

constant taxes from a 0.46 percent average during 2010-2016 to 0.74 percent in the past four quarters shows this change in behaviour (Chart 1.2). The depreciation trend of the domestic currency against the euro was an additional explanatory factor for the upward path of adjusted CORE2 index in 2018 Q1, having a stronger influence on the services segment.

The breakdown shows that price increases were broad-based, with the groups sensitive to the cyclical position of the economy (e.g. clothing and footwear, hygiene and cosmetic items, hotels and restaurants) standing out in the case of non-food items and market services (Chart 1.3). Even in the absence of specific shocks (such as those materialised in the last part of 2017) and of adverse developments in the prices of the main agri-food commodities, food items remain, nevertheless, the most dynamic component of core inflation, with a contribution of more than half to the level of and change in the annual adjusted CORE2 inflation rate.

<sup>2</sup> Even if the liberalisation process was concluded for both electricity and natural gas, price setting for households continues to be of an administered nature, as the Romanian Energy Regulatory Authority maintains endorsement powers.

Chart 1.3. Developments in the prices of the main items in the adjusted CORE2 inflation basket



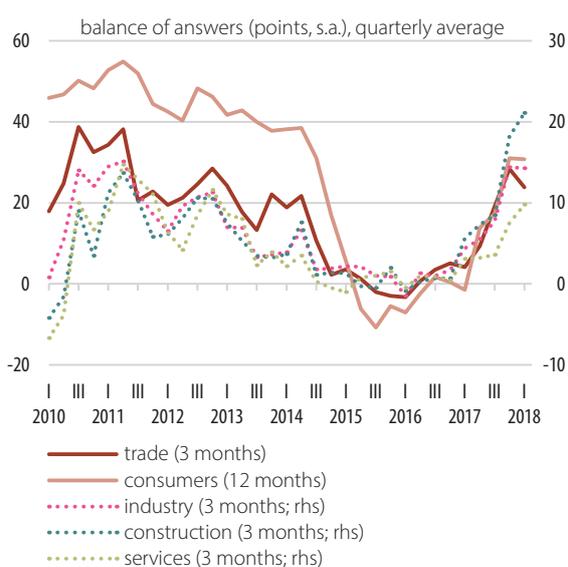
Note: The chart shows items holding about 80 percent of the core inflation basket in 2018. A rectangular area is proportional to the item's share.

Source: NIS, NBR calculations

Economic agents' expectations on price developments were one of the factors favouring an inflationary environment in 2018 Q1 as well, the balance of answers to the DG-ECFIN survey showing markedly positive values – unchanged for industry and consumers and on the rise in the case of services and construction. However, there was a visible decline in the trade sector in the period under review, possibly in response to the slower pace of increase in sales (Chart 1.4). Inflation expectations of financial analysts remained on an upward path over the short time horizon (up to 1 year), yet without exceeding the upper bound of the variation

band of the inflation target. As far as the medium term (2 years) is concerned, after an uneven evolution throughout the quarter, the anticipated inflation rate reverted in March closely to the value posted at end-2017, standing also inside the variation band.

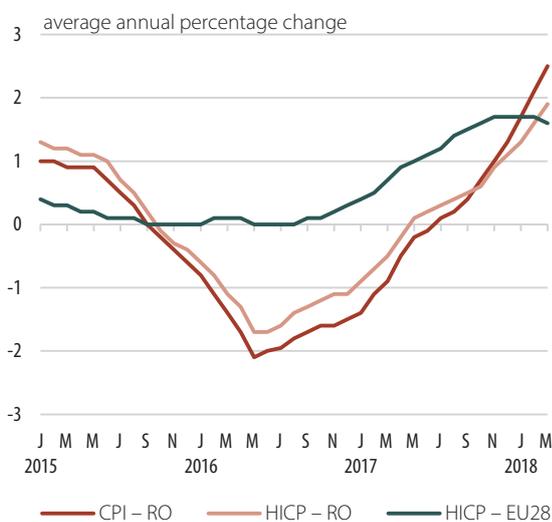
Chart 1.4. Expectations on price developments



Source: NIS/EC-DG ECFIN Survey

As the annual rates of change affected by the lower VAT rate and by the cut in taxes and removal of fees at the beginning of 2017 were dropped out of calculation and the latest, markedly higher rates were incorporated instead, the average annual CPI inflation rate stepped up, reaching 2.5 percent at the end of the quarter, i.e. more than 1 percentage point higher than in December 2017 (Chart 1.5). For the same reasons, the average annual HICP inflation rate rose to 1.9 percent in March, 0.8 percentage points above the end-2017 reading, the difference between the two measures being explained by the

Chart 1.5. Average annual inflation rate: national (CPI) and harmonised (HICP) methodology



Source: Eurostat, NIS

distinct weighting schemes of the two indices<sup>3</sup> – the harmonised measure uses lower coefficients for items in the energy group, whose prices increased considerably in the reference period. Under the circumstances, the differential versus the EU-wide average turned slightly positive for the first time in the last two years and a half, EU inflation remaining around the value posted at end-2017 (1.6 percent).

In March 2018, the annual CPI inflation rate stood at the level forecasted in the February 2018 *Inflation Report*. However, this outcome reflects an offsetting of the errors recorded by the components, i.e. an underestimation of adjusted CORE2 inflation and an overestimation of fuel price dynamics, given that Brent oil prices temporarily stood below the level used in the previous forecasting round.

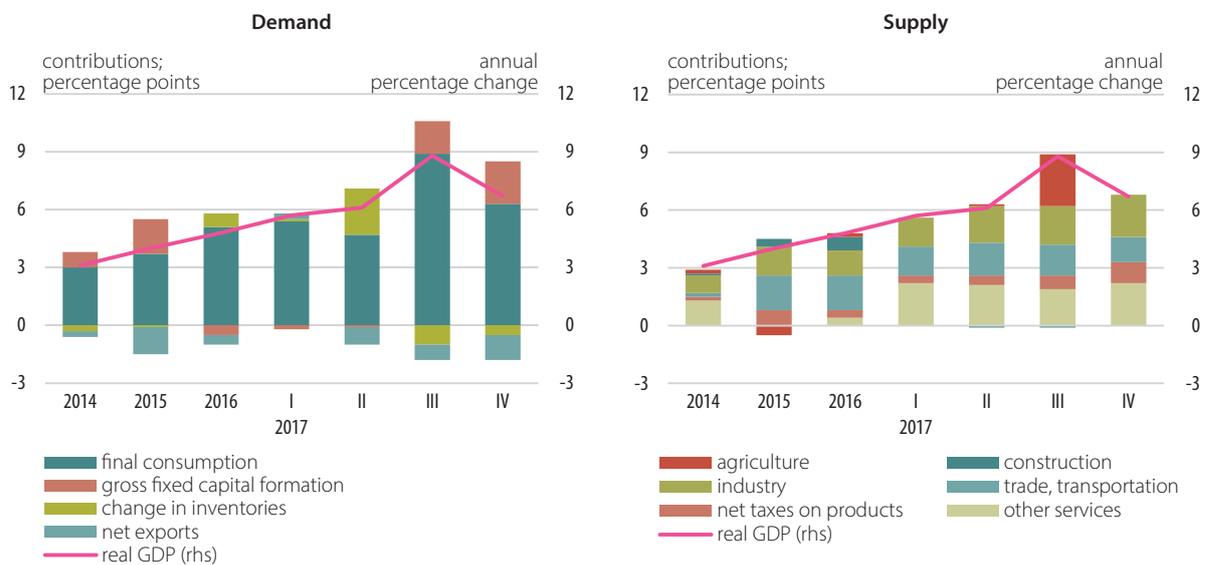
<sup>3</sup> The weighting coefficients used to calculate CPI are based on the *Household Budget Survey* data, whereas in the HICP case, the data considered (as of 2012), aside from the previously mentioned input, refer to the national accounts data regarding household final consumption expenditure (according to Regulation (EU) No. 1114/2010).

## 2. Economic developments

### 1. Demand and supply

2017 was another year when the Romanian economy grew at a brisk pace, i.e. 6.9 percent (one of the fastest across the EU-28); nonetheless, the composition of this growth calls its sustainability into question. Consumer demand further had a prevailing contribution, being strongly boosted by pro-cyclical fiscal measures designed to increase household income and reduce indirect taxation. The underpinning from gross fixed capital formation was relatively modest, as the positive contribution of the private sector (due to the cyclical upturn in residential construction and the slight step-up in equipment purchases) was eroded by the decline in public investment. In addition, imports continue to cover a significant part of domestic absorption, thus undermining the favourable influence coming from the upward trajectory of exports, supported by foreign direct investment and stronger demand from European economies (Chart 2.1).

Chart 2.1. Contributions to economic growth



Source: NIS, NBR calculations

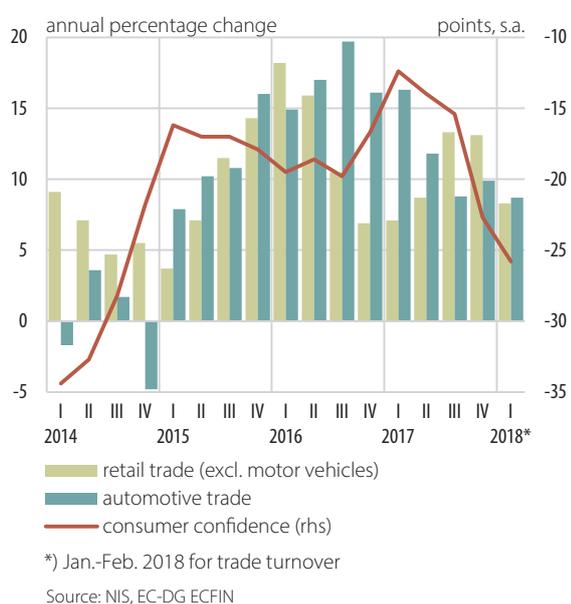
In 2017 Q4 too, real GDP continued to increase at a swift pace, i.e. 6.7 percent in annual terms, albeit slower than the advance reported in the preceding interval, owing further to household consumer demand (9.7 percent), amid the continued positive annual dynamics of household real income. The rise in purchasing power brought about behaviour changes, such as the shift towards higher-end products<sup>4</sup>, the hike in expenditures for market services, as well as the step-up in

<sup>4</sup> The tendency is mirrored by the GfK research, with consumers also showing interest in testing new product varieties.

purchases of durables, a sub-sector strongly correlated with the cyclical position of the economy. At the same time, the expansion in consumer demand was accompanied by the ongoing increase in the market share of modern retailers, i.e. up to 60 percent in 2017.

Households continued to show a strong appetite for consumption at the beginning of 2018 as well (up about 12 percent year on year in January), especially for purchases of durables. In this case, it is noteworthy the demand for motor vehicles and furnishings. However, the annual growth pace of this indicator slowed down

Chart 2.2. Trade and household confidence



in February and is likely to stay on this trend in the following months, as the faster price rises have been eating into the dynamics of household real income and consumer confidence has been worsening (six successive months of decline in the relevant DG ECFIN indicator, amid the uncertainty surrounding the effects of changes in taxation on the financial standing of households and their concerns about debt servicing to banks) – Chart 2.2.

In 2017 Q4, the general government budget execution led to a deficit of lei 17.4 billion (or 2.0 percent of GDP), which stood considerably wider than that recorded in Q3, i.e. lei 0.5 billion. The deficit widening<sup>5</sup> was caused by the substantial rise in public spending<sup>6</sup>, generated by the increase in both capital expenditure<sup>7</sup> and spending for projects financed from non-repayable external funds<sup>8</sup>, as well as by the growth of current expenditure (particularly spending on goods and

services<sup>9</sup>, compensation of employees<sup>10</sup>, social security spending as well as other expenditure in the form of transfers). An opposite impact had the increase in total revenues<sup>11</sup>, which occurred mainly on the back of higher disbursements from the EU and was supported by the rise in receipts from social security contributions, VAT and corporate and personal income taxes<sup>12</sup>.

<sup>5</sup> Reflecting the persistence of a strongly asymmetric intra-annual budget execution pattern, given the deficit of lei 14.6 billion (or 1.9 percent of GDP) posted in 2016 Q4 versus the marginal surplus of approximately lei 0.2 billion registered in the prior quarter; in 2017 as a whole, the budget deficit amounted to lei 24.3 billion (or 2.8 percent of GDP), widening as compared with that recorded a year earlier, i.e. lei 18.3 billion (or 2.4 percent of GDP).

<sup>6</sup> Its real annual dynamics stepped up to 18.5 percent, from 9.8 percent in Q3.

<sup>7</sup> Whose real annual growth rate returned to positive territory.

<sup>8</sup> Its impact on the change in general government budget balance being, however, largely offset by the increase in disbursements from the EU.

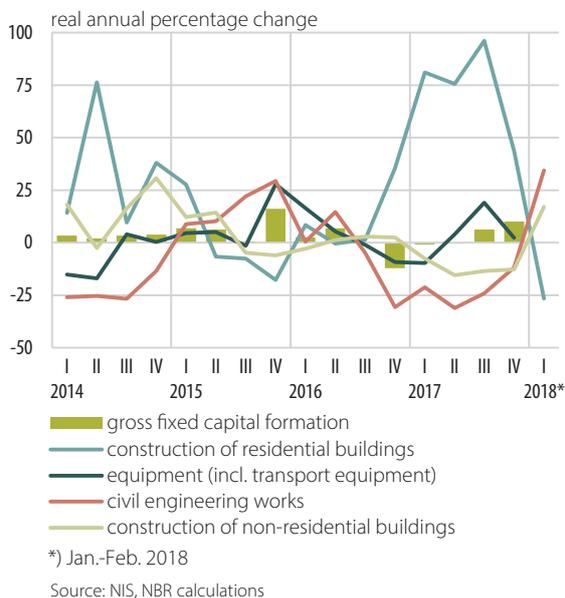
<sup>9</sup> Nonetheless, it decreased in annual terms.

<sup>10</sup> Given, however, the slight deceleration in its annual dynamics.

<sup>11</sup> Their real annual growth rate picked up to 19.2 percent, from 8.6 percent in Q3.

<sup>12</sup> Their impact being partly offset by the contraction of non-tax revenues (as the Q3 figure also reflected the influence of receipts from dividends) which continued, however, to grow significantly in annual terms.

Chart 2.3. Investment



Gross fixed capital formation posted a swifter annual growth rate in Q4 (up to 10 percent), on account of favourable current developments (the quarterly dynamics picked up to 3.5 percent) as well as of a significant base effect visible on the public investment segment. The uptrend is likely to continue in the period ahead as well, spurred by the rebound in non-residential construction and civil engineering works, in the latter case due to an improved EU funds absorption and also as a result of the statistical effects generated by the low levels posted throughout 2017. Conversely, slower growth rates are anticipated for the expansion or upgrading of productive capacities, as well as for residential construction works (Chart 2.3).

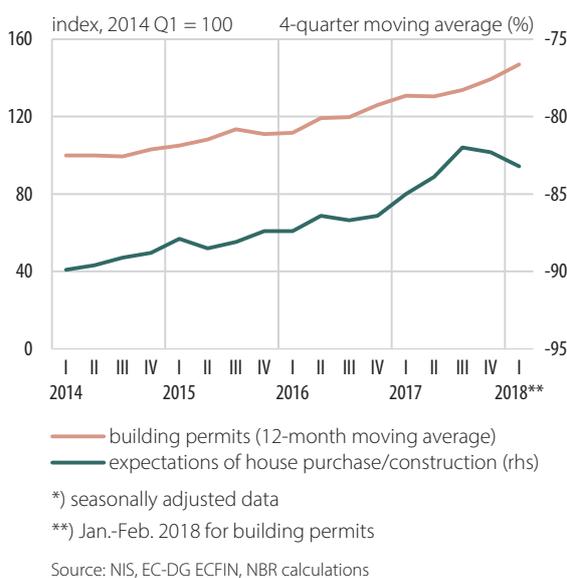
The international context that favoured investment in 2017 and the fact that the local economy was still attractive for foreign investment boosted

the build-up of fixed capital in the corporate sector. Interest in this respect was more visible in the automotive industry (both the motor parts segment integrated in global value chains and the motor vehicles segment that was marked in 2017 by the start of production of two new models as well as by the progress towards automation) and in metallurgy, yet market signals suggest similar developments in the food industry as well. Nevertheless, in 2017 Q4, equipment purchases reported notably slower annual dynamics economy-wide, i.e. down from 19.1 percent to 2.3 percent, while the likelihood of a future step-up is quite remote. Among the

obstacles most frequently mentioned by firms in recent surveys<sup>13</sup> rank the poor transport infrastructure, the lack of skilled workforce, high taxation and the unpredictability of the fiscal environment.

The buoyant expansion of residential construction works, which had been visible starting with 2016 Q4, lost momentum towards the end of 2017, the real dynamics decelerating in Q4 to half of the average for the first three quarters, i.e. down to 43.7 percent (annual change). The trend is likely to persist in the months ahead, on the back of the slower growth pace of household real income and the tighter financing conditions for home purchases – the interest rate on housing loans stayed on an upward path in 2018 Q1 as well, the government support provided under the “First Home” programme has diminished gradually (the value of collateral

Chart 2.4. Outlook for the construction of dwellings\*



<sup>13</sup> The NBR's Survey on non-financial corporations' access to financing in Romania, (December 2017); EIB Investment Survey 2017.

envisaged for 2018 stands 25 percent lower than in 2017), while banks' credit standards may grow tighter in the context of the new legislative initiatives with an impact on banking activity. The NIS/DG ECFIN survey points to a similar outlook, the results for 2017 Q4 and 2018 Q1 showing a visible moderation in households' intention to purchase, build or renovate a home in the following 12 months (Chart 2.4).

In 2017 Q4, non-residential construction works continued to post sharply negative annual dynamics, standing at -12.7 percent over the year as a whole. This trend was most likely ascribable to the developments in the construction of office buildings, as the floor area of completed buildings dropped to a half in 2017, after the substantial rise, i.e. a post-crisis record high, seen in the year before. Moreover, the supply of new commercial property witnessed a slower pace of increase, once economic agents in Bucharest adjusted their demand. A moderate rise in the supply of new office space is anticipated for 2018, one of the most often mentioned inhibiting factors being the sluggish tempo of business expansion in the context of high degree of labour market tightness. Favourable developments are also expected for logistic property (mainly in the surrounding areas of Bucharest), as such buildings are particularly needed to accommodate the advance in consumer goods sales, as well as for commercial property, especially in the cities with less than 250,000 inhabitants.

Albeit on the wane towards the year-end, i.e. down 1.2 percentage points versus 2017 Q3 to 8.8 percent, the annual dynamics of exports of goods and services remained in positive territory in 2017 as well and are further expected to stay there,

Chart 2.5 Exports of goods and services



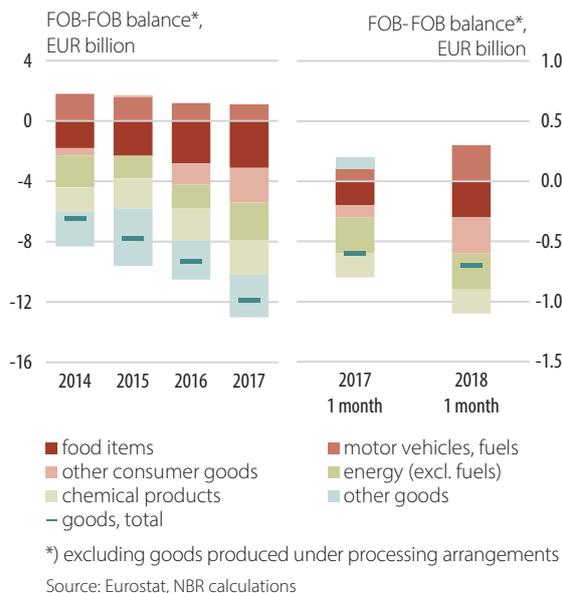
according to the outlook for euro area economic growth. In addition, the volume of external orders to local industrial companies saw its annual rate of increase doubling in the period from October 2017 to February 2018 as compared with the average for the first three quarters. Nevertheless, the recent signals emerging in the euro area (the evolution of industrial output in the first two months of the year and the PMI indicator) point to the likelihood of slightly slower dynamics of exports in the period ahead (Chart 2.5).

Exports of goods grew by 7.1 percent in the latter part of 2017, with exports of transport equipment, machinery and equipment, measurement and control apparatus, electrical equipment making further the largest contribution. In the automotive industry, the real dynamics of turnover on the external market touched 22 percent in Q4, the investment made over the past years helping

consolidate the integration of motor parts production into global value chains, which makes it easier to reap the advantages of the recent favourable external context; furthermore, the higher demand for motor vehicles at EU level also triggered the growth of sales of domestically produced cars, while the interest raised by the

two new models that entered production in the latter part of 2017 suggests the persistence of a positive evolution in the period ahead as well. Export growth was additionally spurred by agri-food commodities, against the background of bumper crops (oleaginous plants, maize, barley).

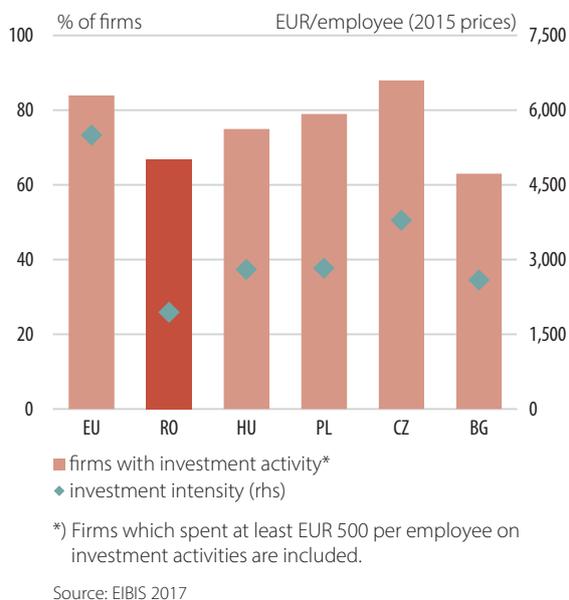
Chart 2.6. Balance on trade in goods



The fast advance in domestic absorption and exports supported the further robust annual rise in imports of goods and services in 2017 Q4 (up 11.9 percent). Imports of consumer goods continued to grow at a brisk pace (about 10 percent), yet intermediate and capital goods also witnessed larger foreign purchases, correlated with certain industrial sub-sectors becoming integrated into the global value chains (e.g. motor parts) and with investment in the private sector (machinery, equipment, fabricated metal products, metal products).

Under the circumstances, the positive differential between the growth rates of imports and exports of goods respectively increased in 2017, causing the balance on trade in goods to worsen by EUR 2.6 billion as compared with a year earlier (Chart 2.6). The adverse effect of this evolution in terms of external balance was compounded by the less strong counterbalance to the deficit of trade in goods provided by net receipts from international services (around 67 percent as compared with over 83 percent in 2015-2016), significantly affected by households' increasing preference for foreign travel and transportation services.

Chart 2.7. Investment activity



### Labour productivity

Labour productivity economy-wide saw a rebound in the latter half of 2017, recovering the loss of momentum<sup>14</sup> manifest in the first two quarters and reverting throughout the interval to the robust growth rate recorded over the past two years. The cyclical position continued to play a favourable role (Box 1), while structural progress was relatively modest, particularly in terms of investment in the economy. In fact, according to the latest EIB survey<sup>15</sup>, Romania ranks last among the EU Member States in terms of investment intensity (euro invested

per employee), whereas nearly 80 percent of firms in Romania are falling in the bottom EU productivity quintile (Chart 2.7). Moreover, the survey suggests a further

<sup>14</sup> Caused by a temporary setback in agriculture.

<sup>15</sup> EIB Investment Survey 2017.

slowdown in investment in the period ahead, the most important deterrents signalled by companies including the inadequacy of transport infrastructure, the uncertain macroeconomic environment, the difficulties in finding skilled staff and the higher energy costs.

The sub-sectors contributing most to the productivity gains reported in 2017 Q4 were industry and trade. In the latter case, while the favourable cyclical position of the economy continued to exert a significant impact, firms' interest in streamlining their operations was mirrored by the growth rate of employment in trade entering a marginally negative territory for the first time in the past five years, concurrently with the still robust dynamics of gross value added in this sector; a notable contributor to this evolution was the online trade, which picked up by almost 40 percent in 2017<sup>16</sup>, a favourable outlook emerging for 2018 as well.

### Box 1. Labour productivity and the business cycle in Romania

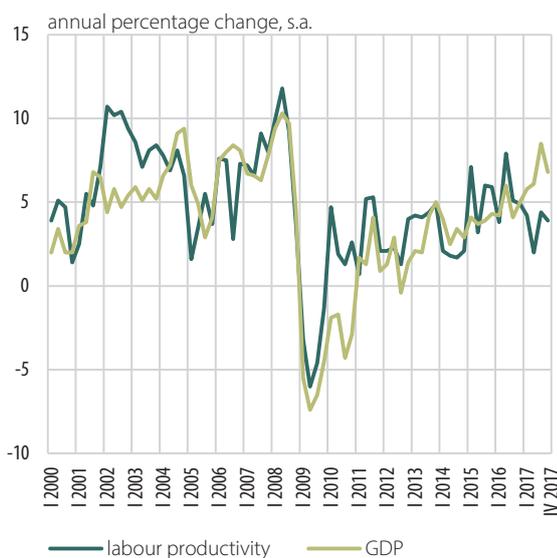
It is a widely accepted view that labour productivity is pro-cyclical, rising during expansions and falling during contractions (Biddle, 2014). The main explanation given in the literature lies in the prevalence of factor hoarding among economic agents as their response to a demand-side shock. This implies relying more on the intensive margin (i.e. the degree of utilisation of production factors) in order to adapt to the new (favourable or restrictive) demand conditions than on the extensive margin, which involves factor adjustment via job creation/job destruction and/or an increase/a decrease in capital, strategies deemed costlier.

Thus, the pro-cyclicality of productivity entails the underutilisation of production factors during recessions and their overutilisation during expansions. Nevertheless, in certain countries such as the USA (Fernald, 2015) or Spain (Jalón, 2017) the pro-cyclicality of productivity shows signs of waning (and even reversing), as economic agents prefer to adjust labour quantity, once labour markets have gradually become more flexible, given that capital is harder to adjust over the short term. The pursuit of such a strategy is also suggested by the more stable developments in the degree of factor utilisation.

As shown in Chart A, in Romania there is a strong correlation between the growth rate of labour productivity and that of GDP, with slightly diverging trends having emerged however over the recent period. In this context, the box aims to assess the cyclical behaviour of labour productivity

in the domestic economy, whether there are signals suggesting changes in the said behaviour and which are the potential determinants of such developments.

Chart A. GDP and labour productivity

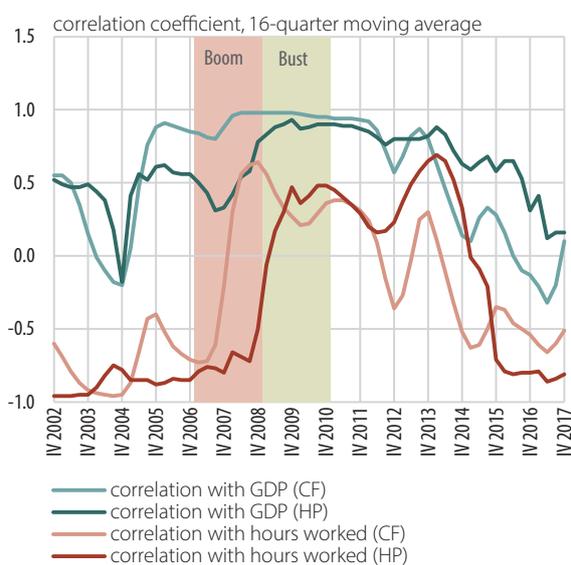


Source: NIS, NBR calculations

<sup>16</sup> According to the data of the Romanian Association of Online Stores.

Building on the model of Galí and van Rens (2014), the assessment of the cyclicity of labour productivity in Romania was conducted based on rolling correlations over longer time periods between the cyclical component of labour productivity (calculated as a ratio of GVA to the number of hours worked by the persons employed) and that of GDP (a measure of output), as well as that of hours worked (a measure of input) respectively. Given the small size of the sample of available data (1999 Q1 – 2017 Q4), the window for the calculation of correlations was set at only 4 years. Two filtering techniques were used to isolate the cyclical component of each indicator: the Christiano-Fitzgerald band-pass filter, with a frequency band of 6 to 32 quarters, and the Hodrick-Prescott filter, with  $\lambda = 1,600$ . The data series concerning GVA and GDP were extracted from national accounts statistics, while the data on the persons employed and the number of hours actually worked from the Household Labour Force Survey.

Chart B. Cyclical correlations



Source: NIS, NBR calculations and estimates

Table A. Change in cyclical behaviour of labour productivity

	Correlation with output			Correlation with input		
	1999 Q1 – 2010 Q4	2011 Q1 – 2017 Q4	diff.	1999 Q1 – 2010 Q4	2011 Q1 – 2017 Q4	diff.
CF	0.86	0.25	-0.61	-0.07	-0.39	-0.32
HP	0.84	0.62	-0.22	0.14	0.02	-0.12

Source: NIS, NBR calculations and estimates

The most relevant stages of the business cycle for assessing how firms adjust to demand-side shocks in terms of labour productivity are the peak and the trough. As far as labour is concerned, companies will start to hire at a fast pace during expansions, paying less attention to workers' skill level and thus reducing average productivity per employee/ to easily lay off surplus staff during recessions, generating productivity gains per employee (counter-cyclical behaviour), or will keep their payrolls relatively stable over the entire cycle and opt for adjusting their degree of utilisation (pro-cyclical behaviour). Thus, the distinction between the two types of behaviour will be made more easily in the extreme points of the business cycle.

The dataset available for Romania covers a single full business cycle, the results confirming the pro-cyclicality of labour productivity at the peak of expansion (2007-2008) and during the subsequent severe recession (2009-2010) respectively (Chart B). The slower pace of contraction in labour input during the crisis as compared with that in economic activity (Table A) is indicative of the prevalence of labour hoarding, which translated into a stronger pro-cyclicality of labour productivity.

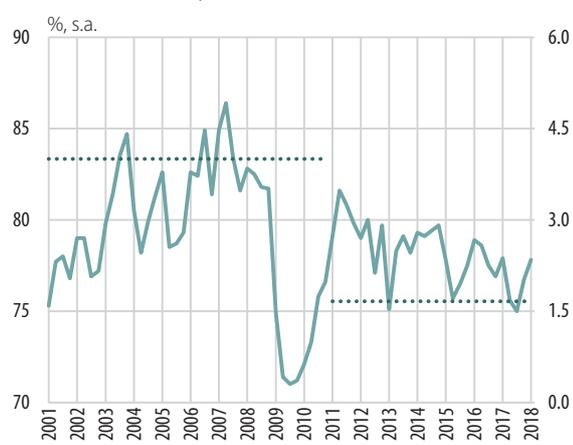
A potential change in the degree of pro-cyclicality of labour productivity may only be assessed at the end of the current business cycle (which is in the expansion stage at present), hence after the peak is reached and recession ends. Nevertheless, the weaker correlation between the two variables as of 2014 and particularly the substantial decline in the variability of the factor utilisation rate in industry in the post-crisis period (Chart C), a broad-based trend among the main industrial

groupings, suggest a reduction in the pro-cyclicality of labour productivity in Romania. One of the key factors that might explain this trend reversal is the enhanced flexibility of the labour market, which was probably driven by the changes introduced by the new Labour Code and the Law on Social Dialogue in 2011, via measures such as the increase in the probationary period, the extension of the duration of fixed-term contracts, the possibility of a reduction in working hours, the elimination of the national collective bargaining agreement, etc. As a matter of fact, a recent survey conducted by Deloitte Legal in 2018 shows that Romania currently ranks among the countries with the lowest dismissal costs in Europe. The downward trend in the pro-cyclicality of aggregate productivity was also probably favoured by the larger share of the tertiary sector, where factor utilisation is generally more

stable and firms prefer the extensive margin for adjustment. Looking ahead, higher investment spending on intangible assets, such as research and development expenditure, which is typically made during booms, might also diminish the pro-cyclicality of productivity, as it implies costs that have null or negative effects on productivity at the time they are incurred, but provide benefits in this respect over the longer term.

Even though the small set of available observations does not allow drawing a certain conclusion, the pro-cyclicality of labour productivity in Romania seems to have waned recently. In so far as the trend is confirmed, the following recession is likely to be accompanied by less severe contractions in labour productivity, concurrently with the adjustment of the activity of economic agents along the extensive margin.

Chart C. Capacity utilisation rate in industry: lower volatility



Note: The standard deviation for 2001-2010 and for 2011-2018 respectively is shown by the dotted line on the right-hand scale.

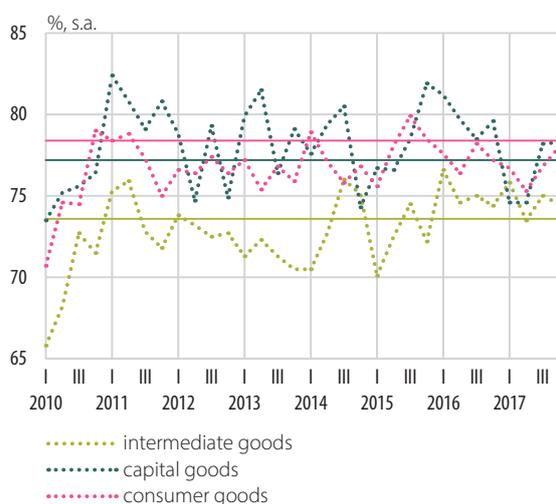
Source: EC-DG ECFIN, NBR calculations

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In industry, the favourable developments occurred against the background of swift demand growth coming from both domestic and external markets, as well as of investment in the expansion and streamlining of some key sub-sectors. In the former case, the sustained euro area economic growth and the robustness of domestic

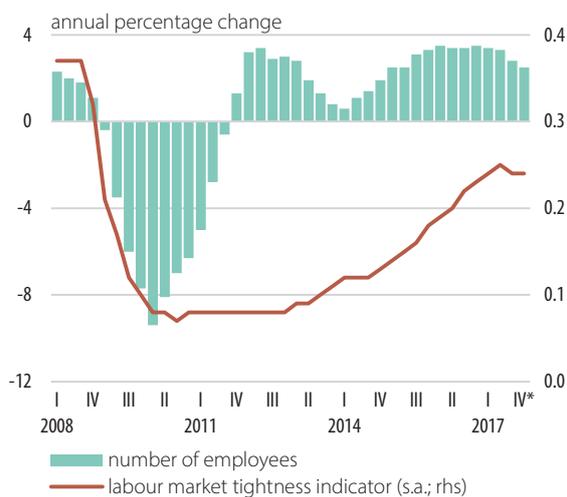
Chart 2.8. Capacity utilisation rate in industry



Note: The solid line represents the long-term average for 2005-2017.

Source: EC-DG ECFIN

Chart 2.9. Number of employees economy-wide and labour market tightness



\*) Oct. 2017 - Jan. 2018 for the number of employees

Source: Eurostat, NIS, NBR calculations

related to the automotive sector, their activity being positively influenced by the favourable developments in global economy, as well as by the integration of local companies into global value chains.

consumption led to substantial annual increases in the volume of new orders in manufacturing on each of the two markets. This translated into a higher capacity utilisation rate in capital goods and non-durables industries (Chart 2.8). The picture is mixed when looking at structural factors. On the one hand, the signals indicating a step-up in investment are increasingly frequent in sub-sectors such as the automotive industry (the completion of automation projects), metallurgy (upgrading and streamlining projects) and even the food industry (where the activity seems to be on a rebound, supported by expansions and the opening of new production facilities). These trends are also confirmed by the EIB survey, with manufacturing ranking first among the sectors with investment activity, with 75 percent of manufacturing companies conducting such operations in 2017 as compared with only 59 percent in 2016. On the other hand, the sluggishness of public investment and the persistence of structural deficiencies on the labour market shape a reserved outlook for productivity gains throughout 2018.

#### Labour market developments<sup>17</sup>

In the period from October 2017 to January 2018, growth in the number of employees economy-wide continued to decelerate, the annual dynamics standing at 2.5 percent (Chart 2.9). This trend was chiefly ascribable to the private sector, slowdowns being noticed in market services (particularly in administrative and support services, as well as transportation) and in certain industries that were hit harder by the hike in wage costs, namely wearing apparel, leather goods, manufacture of wood and furniture (the last two sub-sectors being also affected by the substantial increase in the price of wood). Nevertheless, payrolls continued to rise at a sustained, above-average pace in the industries

<sup>17</sup> The analysis is based on seasonally adjusted data.

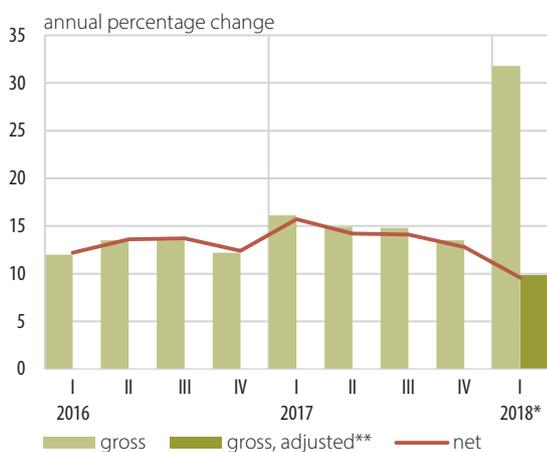
The deceleration trend recorded at aggregate level will probably persist into the coming period as well, the job vacancy rate remaining on the gradually downward path noticeable since early 2017, as the constraints from the limited labour supply<sup>18</sup> are an important deterrent to the expansion of production and investment, while also boosting the recourse to automation. Against this backdrop, the labour market tightness indicator tended to flatten out, yet the persistence of structural problems is a source of relevant pressure on wage setting, as the severe shortage of highly skilled workforce and the ongoing emigration not only weigh on hiring, but also strengthen competition for existing employees.

The less upbeat outlook is corroborated by the results of the latest Manpower survey, which shows firms' employment expectations for 2018 Q2 reaching their lowest ebb in the past two years (modest expectations in trade and transportation, and optimism, albeit declining, in manufacturing and construction). The DG-ECFIN survey also displays a similar trend, indicating the relatively broad-based decrease in hiring expectations.

In 2017 Q4, the annual dynamics of average gross wage earnings slackened slightly to 13.5 percent (down 1.3 percentage points), solely as a result of a base effect becoming manifest in the budgetary sector. Nevertheless, the said growth rate picked up significantly in 2018 (up 18.3 percentage points, to 31.8 percent in January-

February), chiefly mirroring the transfer of social security contributions payable by employers to the charge of employees, as well as the increase in the gross minimum wage economy-wide to lei 1,900 (an 11 percentage point higher hike than the rate of change implied by the aforementioned legislative amendment) and pay rises in both the budgetary sector (by approximately 5 percent on average) and the private sector. However, the annual pace of increase of average net wage earnings slowed down, dropping 3.2 percentage points from 2017 Q4, to 9.6 percent (Chart 2.10). Behind this movement stood both the deceleration in certain market services (trade, administrative and support services, in line with the signals on a decline in activity) and in mining (most likely on account of the shake-up aimed at streamlining operations) and the statistical effect in the budgetary sector associated with the larger wage hikes in early 2017.

Chart 2.10. Nominal wage earnings economy-wide



\*) Jan.-Feb. 2018

\*\*) excluding the effect of the transfer of social security contributions

Source: NIS, NBR estimates

<sup>18</sup> In February 2018, both the ILO unemployment rate and the registered unemployment rate touched historical lows for the period after 2000: 4.6 percent and 3.8 percent respectively.

## 2. Import prices and producer prices on the domestic market

The international energy and metal prices further posted two-digit annual dynamics at end-2017 and in early 2018, the uptrend being also visible across import prices and producer prices on the domestic market. As far as consumer goods are concerned, the already fast pace of producer prices accelerated slightly, excess demand in the economy remaining, over this period, the main factor favouring price rises.

### 2.1. Import prices

Against the background of the upturn in global industrial activity and of supply adjustments, the prices of energy commodities and metals reported two-digit annual growth rates in 2018 Q1 as well (Chart 2.11).

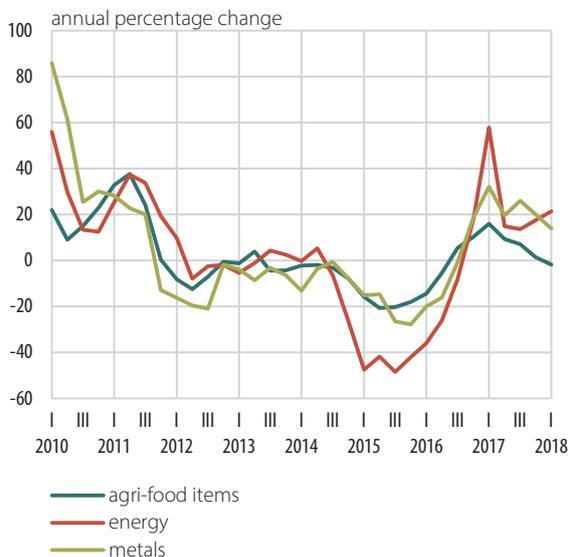
In the first months of 2018, the Brent oil price moved along a volatile path, the uptrend it had followed as early as mid-2017 coming temporarily to a halt in February 2018, amid the turmoil in financial markets and the emergence of

information about the increase in US oil production. Subsequently, the Brent oil price re-embarked on an upward course (towards the end of Q1, it tested again the USD 70 per barrel mark reached in January 2018), being underpinned by the robust demand worldwide and the extension of the agreement between OPEC and some non-OPEC producers on an output cap. Thus, in 2018 Q1 as a whole, the Brent oil price recorded a slightly higher annual pace of increase than in 2017 Q4 (24 percent), the persistence of this trend into the coming period depending largely on the developments in US production. In turn, the price of natural gas stepped up in annual terms, further posting swift dynamics (approximately 26 percent in 2018 Q1).

The favourable performance of manufacturing in China and in most advanced economies led to metal prices remaining on an uptrend.

Nevertheless, in 2018 Q1 the annual growth rate of the aggregate index slowed down to about 14 percent (from 20 percent in 2017 Q4), chiefly against the backdrop of the uncertainty induced by the protectionist measures announced by the US Administration. Accordingly, the prices of the main industrial metals (aluminium, copper, zinc, nickel) reported more moderate annual paces of increase than in the previous quarter, whereas the price of iron ore continued to drop in annual terms, amid the oversupply further prevailing in the market following the reduction of steel production capacities.

Chart 2.11. International commodity prices



Source: World Bank, FAO, NBR calculations

The prices of agri-food commodities generally declined, the annual rate of change of the FAO aggregate index gradually advancing into negative territory as of December 2017, to -1.8 percent in 2018 Q1. Behind this trend stood the prices of dairy products, whose substantial annual increases (over 30 percent in 2017 H1) were followed by a decelerating trend and eventually by decreases as the gap between demand and supply narrowed worldwide. The market for meat products also witnessed a decline in excess demand, which translated into slower annual price dynamics. As far as the crop sector is concerned, the prices of grains and sunflower seeds have recently seen upturns, albeit of low magnitude, while the prices of edible oils and sugar further followed a downward path, amid a bountiful agricultural year and elevated global stocks.

In 2017 Q4, the annual growth rate of the unit value of imports accelerated to 3.1 percent, up 1.4 percentage points from Q3. The effect of higher external prices on imported inflation was however partly offset by the appreciation trend of the leu against the US dollar, whereas the EUR/RON exchange rate saw rather stable developments. The most important contributors to the performance of the aggregate index were mineral products, whose UVI rose to 119.1 percent, chemical products (103.3 percent), as well as base metals and plastic products, the UVIs of which continued to post notable annual dynamics (105.5 percent and 104.1 percent respectively), albeit slightly decelerating.

As regards goods holding a relevant share in the CPI basket, the UVIs of food items generally stood below 100 percent, except for meat products (whose UVI declined however as compared with 2017 H1) and some types of fruit and vegetables (which are *per se* more sensitive to weather conditions and therefore more volatile). Conversely, the unit value of imports of most non-food items recorded faster annual paces of increase.

## 2.2. Producer prices on the domestic market

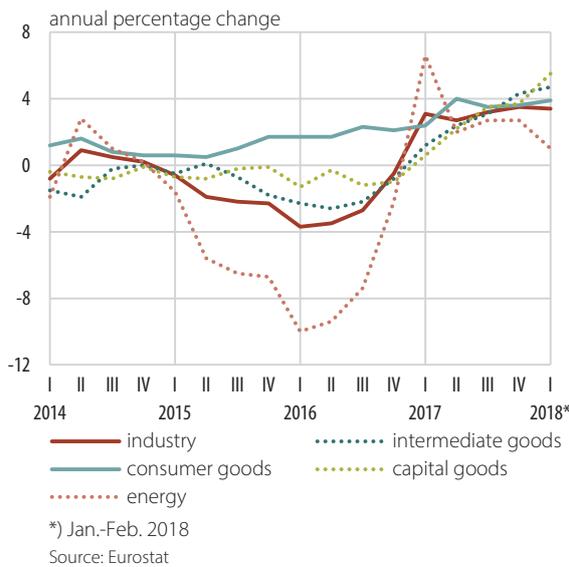
January through February 2018, the annual growth rate of industrial producer prices on the domestic market remained high, at a level similar to that posted in 2017 Q4 (3.4 percent), yet the breakdown shows mixed developments (Chart 2.12). Specifically, the annual rate of change of producer prices in the energy sector slowed down to 1.0 percent (down 1.7 percentage points), the decrease in electricity prices in the domestic wholesale market<sup>19</sup> adding to the impact of the downward correction in the Brent oil price and of the leu appreciation versus the US dollar.

As far as the other groups of goods are concerned, the annual dynamics of producer prices remained on an uptrend. The significant hikes in the international metal and energy prices, visible during 2017, gradually passed through to producer prices for intermediate and capital goods, whose annual paces of growth followed an upward

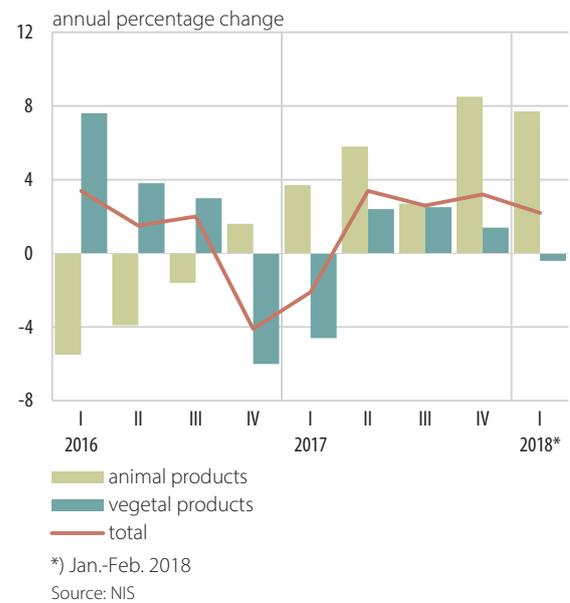
<sup>19</sup> This is strongly correlated with the higher share of electricity from renewable sources.

path, standing at 4.7 percent and 5.5 percent respectively in the first two months of 2018. In the latter case, the depreciation of the domestic currency versus the euro exerted an additional influence, the prices of the said goods being expressed in euro in many cases.

**Chart 2.12. Industrial producer prices on the domestic market**



**Chart 2.13. Agricultural producer prices**



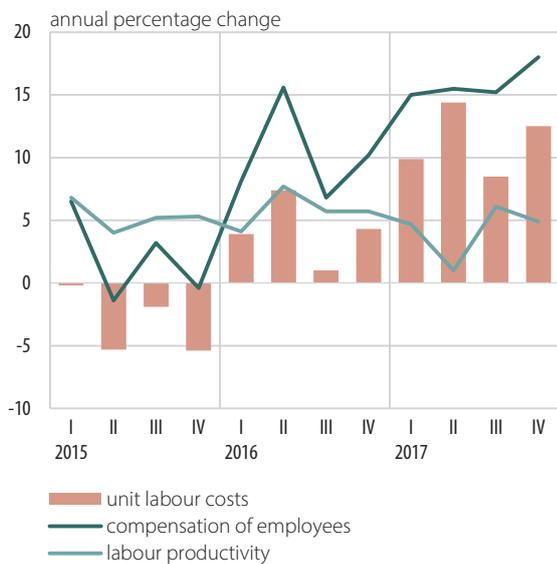
Producer prices for consumer goods (chiefly non-durables) also recorded a swifter annual rate of increase, i.e. 3.9 percent (+0.3 percentage points), with the positive output gap and the built-up pressures from production costs (wage costs, transportation costs, utilities expenses) further playing an important part herein.

At the same time, the annual rate of change of agricultural producer prices on the domestic market slowed down to 2.2 percent in January-February 2018 (down 1 percentage point from 2017 Q4; Chart 2.13). As regards vegetal products, the annual dynamics of their producer prices entered negative territory (-0.4 percent). Nevertheless, the breakdown by main type of product shows opposite trends: a stepped-up increase in wheat prices (which is however expected to be limited, given the comfortable levels of global stocks), a slacker annual decline in the price of sunflower seeds and a deeper fall into negative territory of the annual rate of change of maize prices. In line with the trend visible at European level, the annual pace of increase of prices of animal products decelerated, the major contributors being pork products, milk and eggs.

### Unit labour costs

In 2017 Q4, the annual growth rate of unit labour costs economy-wide remained high (12.5 percent, up 4 percentage points from the previous quarter), owing largely to the faster annual dynamics of compensation of employees (Chart 2.14). The robust pace of increase of unit labour costs throughout 2017 (11 percent), alongside the pressure stemming from the other costs of companies, chiefly utilities expenses, had a bearing on consumer price dynamics, particularly in 2017 H2 and early 2018.

Chart 2.14. Unit labour costs



Source: Eurostat, NIS

As far as industry is concerned, amid the productivity gains seen in the period from October 2017 to February 2018<sup>20</sup>, the annual pace of increase of unit wage costs slowed down as compared with 2017 Q3 (-0.7 percentage points, to 4.2 percent). Behind this downward movement stood solely manufacturing, where the wage-productivity differential witnessed a 3.4 percentage point correction, to 3.2 percent. This evolution was almost broad-based, except mainly for metallurgy, which was hit by short-lived drops in production following the implementation of investment programmes. Consumer goods industries exhibited a similar deceleration trend, yet the annual paces of growth are further (well) above the average, exerting an adverse effect in terms of both inflationary pressures and (domestic and external) competitiveness.

<sup>20</sup> Starting January 2018 (until December 2018), the annual dynamics of the gross wage are adjusted for the effect of changing the way social security contributions are levied and their overall level (from 16.5 percent for employees and 22.75 percent for employers to 35 percent and 2.75 percent respectively), as well as for the effect of the cut in the income tax from 16 percent to 10 percent, so that the resulting values should reflect developments in unit labour costs.

### 3. Monetary policy and financial developments

#### 1. Monetary policy

The NBR continued the adjustment of the monetary policy stance in February, raising the policy rate by another 0.25 percentage points, before leaving it unchanged at 2.25 percent in April. Moreover, during this period, the central bank kept the minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions at 8.0 percent. The measures were aimed at bringing the annual inflation rate back into line with the flat target of 2.5 percent  $\pm 1$  percentage point in a lasting manner, inter alia via the solid anchoring of inflation expectations over the longer time horizon.

In its February meeting, the Board of the National Bank of Romania decided to increase the monetary policy rate to 2.25 percent from 2.0 percent, in a context in which the annual inflation rate had continued to rise at end-2017, to 3.32 percent in December<sup>21</sup> – inside the variation band of the target, but significantly above its midpoint and the forecast – and, according to the new medium-term forecast, it was expected to follow a steeper upward path and run well above the target band in the first quarters of 2018, hence exceeding the previously-anticipated values, before posting a downward correction and then levelling off in the upper half of the band in 2019<sup>22</sup>. The sizeable fluctuation in the forecasted annual inflation rate was exclusively attributable to the transitory action of supply-side factors, more strongly inflationary in the short run than previously projected, but at the same time generating relatively sturdier disinflationary base effects starting 2018 Q4<sup>23</sup>.

Relatively stronger inflationary pressures were anticipated to stem in 2018 also from the cyclical position of the economy and from the steep uptrend in inflation expectations over the short term and, in 2019, from developments in import prices<sup>24</sup>, the annual adjusted CORE2 inflation rate thus being envisaged to pick up somewhat faster on the short time horizon and stay around 3.7 percent in 2019. Moreover, there was the risk that, against this background, the strong inflation bout anticipated to

<sup>21</sup> From 3.23 percent in November 2017.

<sup>22</sup> The medium-term forecast published in the February 2018 *Inflation Report* saw the annual inflation rate rising towards 5 percent at mid-2018, then falling to 3.5 percent in December 2018 (3.2 percent in the earlier projection) and declining very slightly over the following four quarters, to 3.1 percent, the same level as previously forecasted.

<sup>23</sup> The most notable influences were expected from the hikes recorded towards end-2017 and at the beginning of 2018 in electricity, natural gas and heating prices, as well as from costlier fuels, amid higher oil prices and the reintroduction of the special excise duty on motor fuels; similar effects would stem from the faster dynamics of VFE prices, as well as from the hikes in tobacco product prices, all of which overlapped in the early months of 2018 the inflationary base effects associated with the previous cuts and removals of indirect taxes and declines in administered prices.

<sup>24</sup> Wage costs were anticipated to exert less intense pressures than forecasted earlier across the entire projection horizon.

be driven by supply-side shocks in the first part of 2018 might trigger second-round effects via the worsening of medium-term inflation expectations. The prospects for a relatively steeper increase in excess aggregate demand in the near run were fuelled by the significantly faster-than-expected acceleration in economic growth in 2017 Q3<sup>25</sup>, to a post-crisis peak of 8.8 percent, and by the upward revision of its dynamics forecasted for 2017 Q4 and 2018 Q1, projected however to enter a deceleration trend in that period. The positive output gap was expected to witness a trend reversal only towards end-2018, given that the slowing pace of economic growth was anticipated to remain above potential in the current year and fall below potential in 2019<sup>26</sup>.

The underlying assumptions of this outlook were the protraction of the expansionary nature of fiscal and income policies in 2018<sup>27</sup>, followed by their return to a counter-cyclical stance in 2019, the deceleration in the growth rate of households' real disposable income, inter alia as a result of the step-up in inflation, the gradually less accommodative monetary conditions, envisaged to become quasi-neutral in 2019, but also the improved EU funds absorption, as well as faster economic growth in the euro area/EU and globally.

According to subsequently-released statistical data, the annual inflation rate had witnessed a sizeable upward correction at the beginning of 2018, in line with expectations, increasing to 4.32 percent in January and 4.72 percent in February – significantly above the upper bound of the variation band of the target, but slightly below the forecast –, under the impact of supply-side factors<sup>28</sup>, but also of the gradual build-up of both demand-pull and cost-push pressures, to which added the influences of the exchange rate of the domestic currency, mirrored particularly in the dynamics of services prices<sup>29</sup>. Expectations were also confirmed with regard to a slowdown in economic expansion in 2017 Q4 – after having accelerated for four consecutive quarters –, its annual dynamics remaining, however, robust at 6.9 percent, implying that the upward trend of excess aggregate demand was likely to continue while witnessing a relatively stronger moderation. The GDP advance continued to be supported mainly by household consumption, ahead of gross fixed capital formation; nevertheless, the contribution of net exports remained negative and even increased,

<sup>25</sup> As well as by the composition of growth determinants, on both the demand and supply side.

<sup>26</sup> Also amid the foreseen pick-up in the growth rate of potential GDP in 2019.

<sup>27</sup> Given the implementation of the new package of fiscal, wage and other income measures envisaged for this year, which included primarily: lowering the personal income tax rate from 16 percent to 10 percent; increasing personal deductions by about 60 percent for low-wage taxpayers; decreasing the overall rate of social security contributions from 39.25 percent to 37.25 percent and transferring them in the charge of employees, except for a contribution of 2.25 percent (precautionary contribution for labour, payable by the employer); replacing the corporate income tax by a revenue tax of 1 percent for enterprises with revenues ranging between EUR 0.5 million and EUR 1 million; raising the economy-wide gross minimum wage from lei 1,450 to lei 1,550 (or lei 1,900 gross wage including the contributions transferred to employees) as of 1 January 2018; increasing the minimum guaranteed pension from lei 520 to lei 640 as of 1 July 2018; raising the pension point from lei 1,000 to lei 1,100 starting 1 July 2018. Moreover, the unified wage law provided for a 25 percent rise in the gross wages of budgetary sector employees in January 2018, followed by a 20 percent rise in the gross wages of staff in the education sector in March, as well as gradual pay rises by 2022 for each category of employees, except for doctors and nurses, whose wages were to grow in one go in March 2018. The package also included measures such as: reducing the percentage of payment to Pillar Two of the pension system from 5.1 percent to 3.75 percent and postponing the introduction of the minimum inclusion income (to 1 April 2019).

<sup>28</sup> The main contributions came from the base effects associated with cutting/scrapping of indirect taxes and non-tax fees and charges implemented in the same year-earlier period, from the recent hikes in the prices of electricity and natural gas, as well as from the costlier fuels amid higher oil prices.

<sup>29</sup> The annual adjusted CORE2 inflation rate had risen to 2.8 percent in January, from 2.4 percent in December, and to 2.9 percent in February.

given that exports dynamics posted a more pronounced deceleration than those of imports, conducive to a further deterioration of the trade balance. Labour market tightness tended to level off, albeit at a high level, while the annual growth rate of the average gross nominal wage stuck to two-digit levels in 2017 Q4, probably moderating slightly in January 2018<sup>30</sup>; the annual dynamics of average net real wage earnings saw a more visible slowdown in recent months, mainly as a result of the pick-up in the annual inflation rate.

Monetary conditions continued to be less accommodative in Q1; the key interbank money market rate rose slightly, while the exchange rate tended to stabilise in the latter part of the interval, in the context of external influences together with the higher interest rate differential versus the prevailing levels in the EU and across the region. Nevertheless, the spread between the average interest rate on new loans and that on new time deposits widened slightly in January and February, partially reflecting a slower pass-through to the latter of the policy rate increase, probably also owing to a substantial transitory rise in the liquidity surplus on the money market, implying a stronger recourse by credit institutions to the NBR's deposit facility.

The annual growth rate of credit to the private sector stood still in the first two months of the year (an average of 6.5 percent, the same as in 2017 Q4)<sup>31</sup>, with the effect of the faster dynamics of new leu-denominated loans to households – both housing loans and consumer credit and other loans – being offset by the loss of momentum in the case of loans to non-financial corporations<sup>32</sup>. The domestic currency component also saw its average annual dynamics remain unchanged, whereas foreign currency credit contracted at a faster rate, so that the share of leu-denominated loans in total private sector credit widened to 62.9 percent. However, liquidity in the economy posted a swifter annual increase (12.9 percent versus 12.5 percent)<sup>33</sup>, spurred by the relative rise in payments from EU funds (including to farmers) and by the faster annual dynamics of government spending on goods and services and subsidies respectively.

The short-term projection updated in this context reconfirmed the prospects for the annual inflation rate to rise marginally and then level off above the variation band of the target over several months, in line with the February 2018 medium-term forecast, which anticipated the return of the annual inflation rate to the upper bound of the variation band towards end-2018. The outlook for a further slowdown in economic expansion in the first half of 2018 was also reconfirmed, which masked however a renewed step-up in its quarterly dynamics in Q1<sup>34</sup> followed by a marginal decline in Q2, implying a likely slight widening of the positive output gap. Other sources of two-way risks to the medium-term inflation forecast were, on one hand, the fiscal policy stance,

<sup>30</sup> According to the data adjusted for the effect arising from transferring the social security contributions payable by employers to the charge of employees.

<sup>31</sup> Expressed in real terms, it declined from 3.3 percent to 1.9 percent.

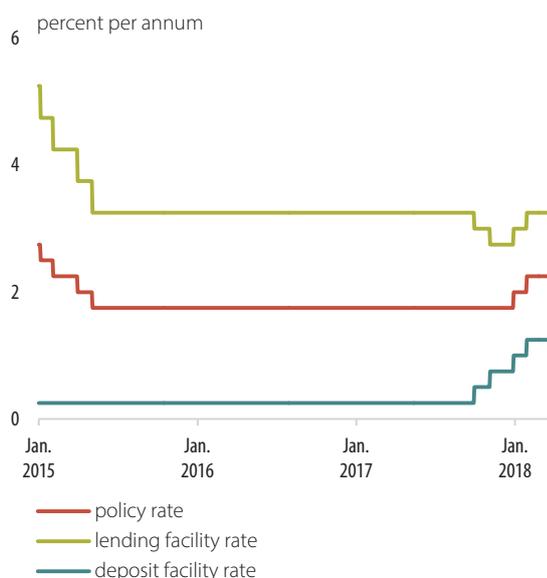
<sup>32</sup> Probably also due to larger disbursements from the budget and/or related to EU funds.

<sup>33</sup> Whereas in real terms, the average annual dynamics of M3 trailed behind the 2017 Q4 average.

<sup>34</sup> According to high-frequency indicators, private consumption was anticipated to be the engine of economic growth, but also the major determinant of its deceleration in Q1; positive contributions to GDP dynamics were also expected from gross fixed capital formation and possibly from general government consumption, whereas the negative contribution of net exports was expected to persist or even widen.

labour market conditions and the pace of economic expansion in the euro area and globally and, on the other hand, the uncertainties about the carrying out of public investment and EU funds absorption, as well as the new legislative initiatives regarding the banking sector; to these added the persistence of low inflation in the euro area

Chart 3.1. NBR rates



and the likely monetary policy stances of the ECB and of central banks in the region, as well as the possible escalation of trade protectionism.

Against this background, ensuring adequate monetary conditions with a view to anchoring medium-term inflation expectations and keeping the annual inflation rate in line with the current medium-term forecast, while safeguarding financial stability, warranted the status quo of the monetary policy rate. Therefore, in its meeting of 4 April 2018, the NBR Board decided to keep unchanged the monetary policy rate at 2.25 percent, the deposit facility rate at 1.25 percent and the lending facility rate at 3.25 percent (Chart 3.1).

At the same time, however, in order to strengthen the influence and the relevance of the policy rate and its signalling role, implicitly the transmission of impulses of its change, the central bank tightened

control over banking system liquidity, by conducting as of mid-April – for the first time in seven years – one-week deposit-taking operations, via fixed-rate tenders (i.e. the monetary policy rate) with full allotment.

## 2. Financial markets and monetary developments

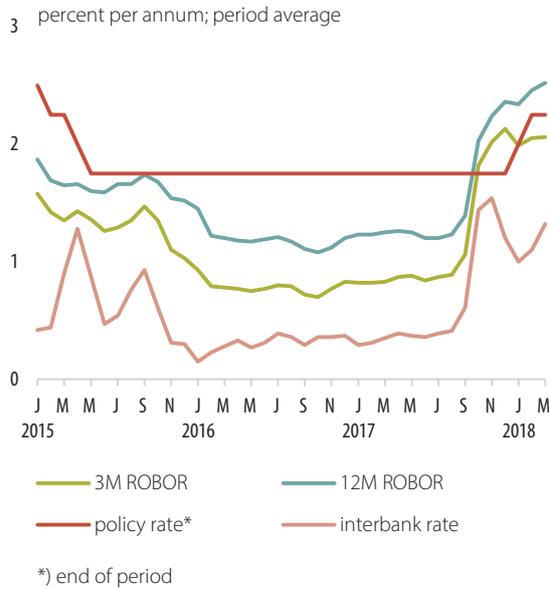
In 2018 Q1, longer-term interbank money market rates continued to increase, albeit more slowly, while the EUR/RON exchange rate stuck to its generally upward trend until towards mid-Q1, before stabilising somewhat. The annual growth rate of credit to the private sector remained unchanged in the first two months of 2018, while liquidity across the economy further expanded at a brisker rate, amid the relatively larger disbursements to recipients of EU funds and the faster rise in some types of budget expenditures.

### 2.1. Interest rates

After the significant downward adjustment seen in December 2017, the daily average interbank money market rate stayed during Q1 in the vicinity of the deposit facility rate, whose level – alongside that of the lending facility rate – was raised by the central bank in tandem with the monetary policy rate; its quarterly average (1.13 percent) stood, however, 0.27 percentage points below the previous three months' reading.

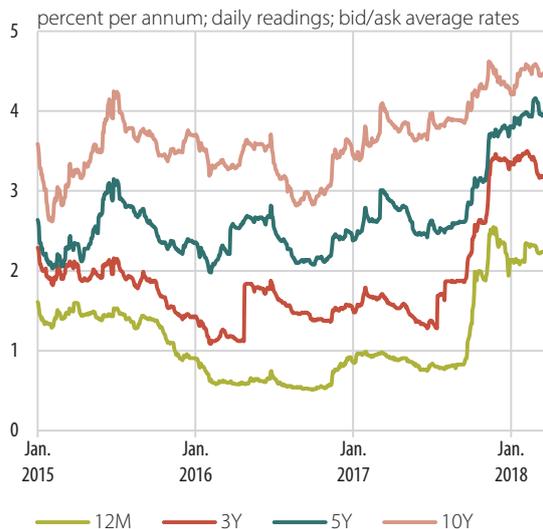
These developments occurred in a context in which the large net reserve surplus that had re-emerged on the money market towards end-2017 continued to widen under the impact of the Treasury's substantial liquidity injections<sup>35</sup> and its mopping up by the central bank was carried out exclusively through the deposit facility.

Chart 3.2. Policy rate and ROBOR rates



The daily readings of longer-term interbank money market rates (3M-12M ROBOR) saw their downtrend<sup>36</sup> come to a halt after the NBR Board's January decision to raise the policy rate, before witnessing slight upward adjustments following a similar decision in the February meeting (Chart 3.2). Subsequently, they tended to stabilise at values around 0.20 percentage points below the new level of the monetary policy rate in the case of the 3M maturity and above the policy rate by up to about 0.20 percentage points for the 6M-12M maturities. However, the average 3M ROBOR rate was slightly lower in March than in December 2017, coming in at 2.06 percent, while the average 6M and 12M rates added 0.08 percentage points (to 2.39 percent) and 0.16 percentage points (to 2.52 percent) respectively.

Chart 3.3. Reference rates on the secondary market for government securities



Developments on the government securities market reflected, in turn, the influences exerted by the current/expected evolution of liquidity conditions on the interbank money market and by credit institutions' expectations on the further adjustment of the monetary policy stance, to which added the influences from the external environment, characterised during this period by mixed behaviours of long-term government bond yields both in developed economies and regionally (Chart 3.3). Against this backdrop, government securities yields at the short end of the curve (6-12 months) witnessed minor changes over the reported quarter as a whole, as their steeper fall at the onset of January was followed by upward adjustments immediately after the monetary policy rate hikes and then by a slow downtrend in the closing part of the period. Looking at the longer end of the maturity spectrum (5-10 years), bond yields

<sup>35</sup> Associated with the easing of the budget execution in the first months of 2018 versus the same year-earlier period, as well as with the repayment of a government bond series maturing in January and worth lei 8 billion.

<sup>36</sup> Which they had embarked on at the end of the previous quarter.

trended upwards in January and for most of February – the upward move being more visible for the 10-year maturity, whose evolution was correlated with that of similar securities in developed economies and in the region –, before declining slightly<sup>37</sup>, also amid financial investors probably reconsidering the attractiveness of these investments in the context of the recent monetary policy decisions. Consequently, the monthly averages of reference rates on the secondary market<sup>38</sup> stood slightly lower in March 2018 than in December 2017 for 6-month and 12-month maturities (to 1.97 percent and 2.26 percent respectively) and higher for 5-year and 10-year maturities (to 4.03 percent and 4.50 percent respectively). The yield curve largely preserved its gentler slope, after the relative flattening seen in the previous quarter.

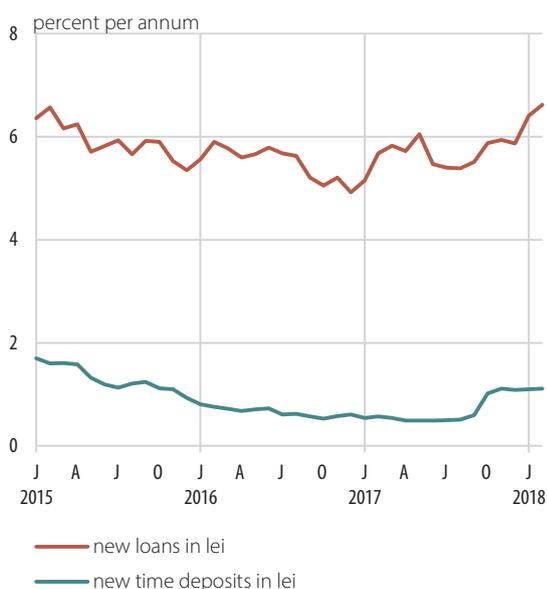
On the primary market<sup>39</sup>, the bid rates at the last auctions conducted in March increased further versus end-2017 Q4 readings, the changes being somewhat minor for short and long maturities and more pronounced in the case of 5- and 7-year residual maturities (by up to 0.3 percentage points). Investors' rekindled interest in certain maturities was also illustrated by developments in the average demand-to-supply ratio which, after the January fall, rose gradually, returning in March to the end-December 2017 reading. This was also

correlated with the progressive increase in the ratio of the accepted volume to the announced volume by the MPF at the securities auctions – to 0.95 in March<sup>40</sup> from 0.48 in December – as well as with the decline in the average maturity of securities issued, to 4.8 years from 5.4 years in 2017 Q4.

December 2017 through February 2018, the average interest rate on new loans to non-bank clients went up 0.68 percentage points (to 6.62 percent), owing to the likely incorporation – with a certain transmission-specific lag – of the previous months' adjustment in the relevant rates on the interbank money market, as well as to some changes – possibly incidental – in the structure of new loans (Chart 3.4). Against this background, the average lending rate on new business to households added 0.80 percentage points, to 7.84 percent, with interest rates on consumer and housing loans

posting a somewhat similar advance, i.e. 0.48 percentage points and 0.41 percentage points respectively. In turn, the average lending rate on new business to non-financial corporations climbed 0.33 percentage points, to 5.02 percent, on account of both

Chart 3.4. Bank rates



<sup>37</sup> Five-year bond yields went up around 0.2 percentage points at the beginning of March, but this leap was corrected afterwards.

<sup>38</sup> Bid/ask average rates.

<sup>39</sup> On 1 February, the MPF issued two new bond series on the external market, with maturities of 12 years and 20 years respectively and worth EUR 750 million and EUR 1,250 million respectively; moreover, on 14 February, the MPF issued on the domestic market bonds worth EUR 251.6 million by reopening the books on a series maturing in 2021.

<sup>40</sup> The MPF partly/fully rejected the bids submitted at the auctions held in January and February (three each) as well as in March (two).

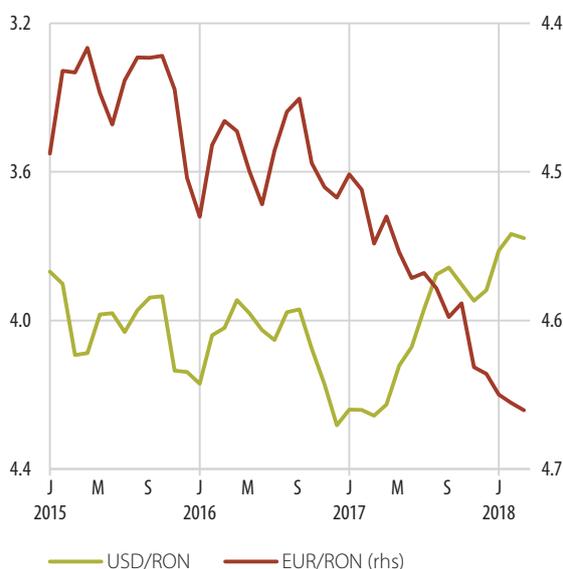
categories of loans (below and above EUR 1 million equivalent respectively). At the same time, the average remuneration of new time deposits from non-bank clients remained unchanged at 1.11 percent, further incorporating at a relatively slower pace the effects of the policy rate hike in the case of households (up 0.20 percentage points, to 0.97 percent) and witnessing a decline for non-financial corporations (down 0.10 percentage points, to 1.17 percent), a segment which is more sensitive to changes in shorter-term interbank rates.

## 2.2. Exchange rate and capital flows

The EUR/RON exchange rate remained on a generally upward path in the first part of 2018 Q1, witnessing, at the same time, stronger fluctuations, before stabilising

somewhat following the increase in the monetary policy rate in February and the return of international financial markets to a state of relative calm (Chart 3.5).

Chart 3.5. Nominal exchange rate



The EUR/RON stuck to an uptrend in January, amid the ongoing worsening of the trade balance and current account balance<sup>41</sup> in conjunction with the strongly pro-cyclical fiscal and income policy stance, as well as amid expectations for a weaker domestic currency. However, the exchange rate saw its movements become more irregular, posting a short-lived decline towards the middle of the period, followed by a rise to new historical highs – against the background of renewed temporary tensions on the domestic political stage<sup>42</sup> –, and then by a partial downward correction. Overall, its evolution diverged from that of the exchange rates of the main currencies in the region, which came in this period under the favourable effects exerted

on the global financial market sentiment by the consolidation of economic growth in the US, euro area and worldwide<sup>43</sup>.

The EUR/RON exchange rate continued to fall in the first days of February, but after a new moderate upward adjustment, it tended to remain relatively stable for the rest of the quarter, slightly below the highs recorded in January. This mainly reflected the higher attractiveness of domestic currency-denominated investments, due to the successive rises in the NBR's monetary policy rate, and, probably, a relative improvement in the dynamics of foreign trade and/or financial flows in March.

<sup>41</sup> In January, the trade deficit widened by 30 percent year on year, while the current account balance, despite displaying a surplus that had been typical for this month over the past 5 years, decreased by 16 percent compared with January 2017.

<sup>42</sup> The Prime Minister resigned on 15 January, a new Prime Minister was appointed on 17 January, and the new Government was endorsed on 29 January.

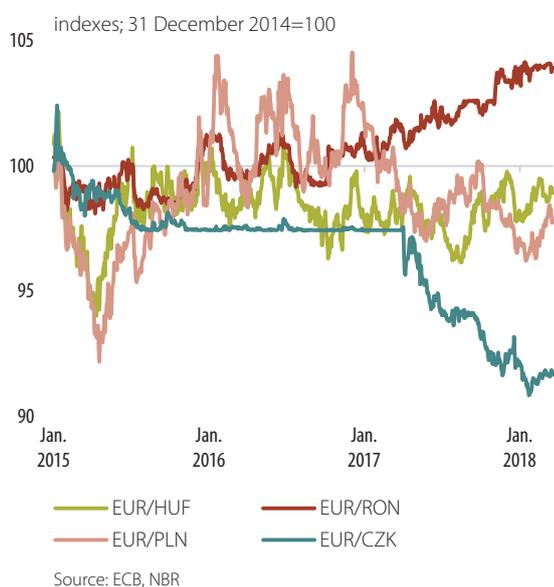
<sup>43</sup> Indicated both by data released in the reported period and by the revised forecasts of the IMF/World Bank for 2018/2019.

Table 3.1. Key financial account items

	EUR million					
	2 mos. 2017			2 mos. 2018		
	Net acquisition of financial assets*	Net incurrence of liabilities*	Net	Net acquisition of financial assets*	Net incurrence of liabilities*	Net
Financial account	1,026	729	296	3,066	2,469	598
Direct investment	212	1,028	-816	4	760	-756
Portfolio investments	142	-327	469	-24	1,711	-1,734
Financial derivatives	x	x	-11	x	x	43
Other investment	470	27	443	1,314	-2	1,316
– currency and deposits	205	-310	515	840	-23	864
– loans	35	24	10	-19	-120	100
– other	230	313	-82	493	141	352
NBR's reserve assets, net	210	0	210	1,730	0	1,730

\*) "+" increase/"-" decrease

Chart 3.6. Exchange rate developments on emerging markets in the region



Under such circumstances, the increase in the EUR/RON exchange rate in the first 10-day period of February occurred amid a bout of volatility on the international financial markets – after a prolonged calmness – triggered by a rise in investors' risk aversion in the context of an upward revision of their expectations on US inflation developments and, implicitly, on the pace of monetary policy tightening by the Fed<sup>44</sup>.

The exchange rates of the currencies in the region posted similar developments at that time, yet their uptrend extended until the end of the quarter, in light of: (i) the relatively high volatility which persisted on the international financial market amid uncertainties generated by the protectionist measures adopted by the US Administration; (ii) stronger expectations on the Fed continuing to gradually increase the policy rate<sup>45</sup>; and (iii) the further relatively low level of inflation in these economies, with implications on the monetary policy stances of the central banks in the region.

The interbank forex market turnover further picked up compared with the previous quarter, concurrent with the widening of the total market deficit, as residents' net demand for foreign currency rose to a two-year high, while that of non-residents increased slightly (Table 3.1).

During 2018 Q1, the domestic currency weakened against the euro by 0.5 percent in nominal terms<sup>46</sup> and strengthened by 0.8 percent in real terms. In relation to the US dollar, the leu appreciated by 3.7 percent in nominal terms and by 5.1 percent in real terms, given that the EUR/USD picked up faster in the first part of the quarter, reaching near 3-year highs, before tending to hover around these levels<sup>47</sup>. Looking at the average annual exchange

<sup>44</sup> The reaction of the financial market was a result of the stronger-than-expected evolution of some US labour market indicators (especially wage earnings) as shown by the data released on 2 February, likely to fuel inflation expectations, also amid the envisaged fiscal policy easing.

<sup>45</sup> Given that both the minutes of the FOMC meeting in January, released on 21 February, and Chairman Powell's semi-annual testimony before Congress were perceived by investors as signalling an improved outlook of short-term economic growth.

<sup>46</sup> During the same period, the Polish zloty depreciated by 0.1 percent, while the Hungarian forint and the Czech koruna appreciated by 0.3 percent and 0.9 percent respectively.

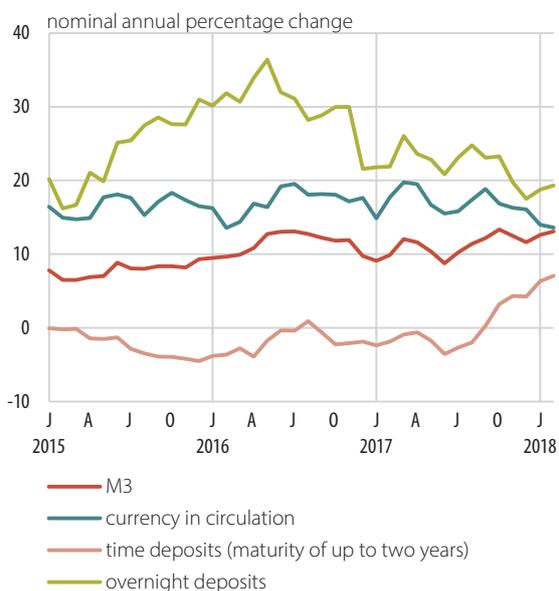
<sup>47</sup> In its turn, the gold price per ounce in US dollars continued to grow sharply in January and tended to fluctuate subsequently, increasing in the quarter as a whole.

rate dynamics in 2018 Q1, the domestic currency saw a widening in its nominal depreciation against the euro, but especially in its appreciation against the US dollar (Chart 3.6).

**Table 3.2. Annual growth rates of M3 and its components**

	nominal percentage change					
	2017				2018	
	I	II	III	IV	Jan.	Feb.
M3	10.4	10.2	11.3	12.5	12.6	13.1
M1	21.4	20.8	21.6	19.0	17.3	17.6
Currency in circulation	17.4	17.2	17.3	16.4	14.0	13.6
Overnight deposits	23.2	22.4	23.7	20.2	18.8	19.3
Time deposits (maturity of up to two years)	-1.7	-2.0	-1.5	3.9	6.4	7.1

**Chart 3.7. Main broad money components**



## 2.3. Money and credit

### Money

January through February 2018, the annual growth rate of broad money (M3) continued to increase (12.9 percent on average versus 12.5 percent in 2017 Q4; Table 3.2)<sup>48</sup>, amid relatively higher disbursements to recipients of EU funds, for agriculture as well, and the faster annual dynamics of government spending on goods and services and on subsidies respectively<sup>49</sup>.

From the perspective of M3 components, its advance was supported, in this period as well, by the stepped-up annual growth of time deposits with a maturity of up to two years, which reached a post-December 2012 high. This was ascribable to non-financial corporations' deposits, which, given the relatively higher interest rates applied, were spurred by the sector's partial shift away from overnight deposits. Against this backdrop, as well as following the slacker dynamics of currency in circulation, narrow money (M1) continued to witness a slower rise and its share in broad money decreased slightly, yet remained large from a historical context, i.e. 59.7 percent in February (Chart 3.7).

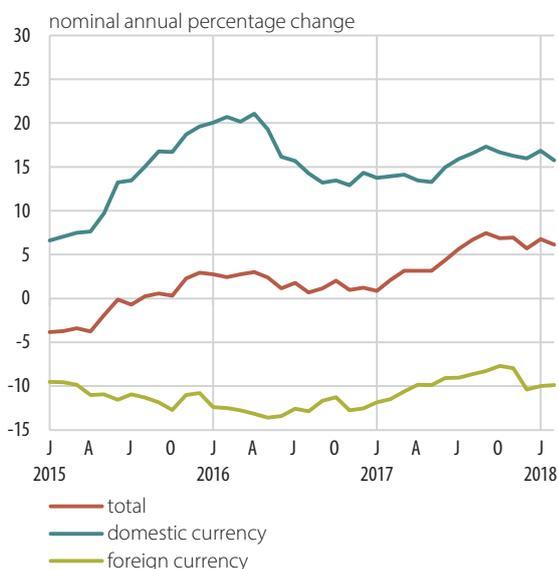
From the perspective of institutional sectors, the developments in broad money dynamics reflected the swifter pace posted by both non-financial corporations' deposits – fuelled in this period by higher payments for agriculture<sup>50</sup> and the fast

<sup>48</sup> However, in real terms, the average annual dynamics of M3 slowed down from 2017 Q4, given the pick-up in the annual inflation rate.

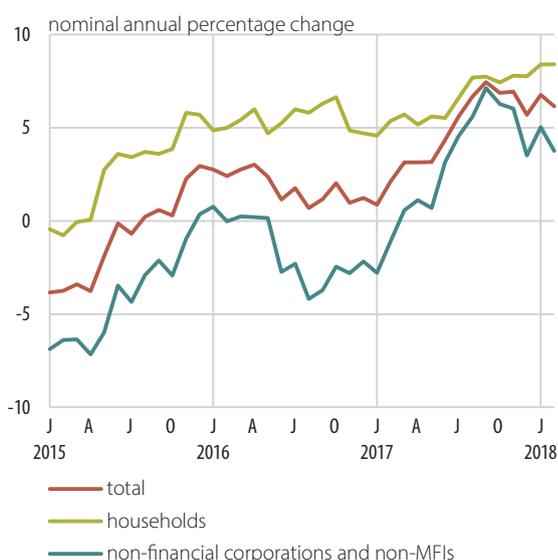
<sup>49</sup> Primarily due to payments to support agricultural producers and to subsidies for railway passenger transport and underground transport (according to the MPF Note on general government budget execution data).

<sup>50</sup> According to press releases from the Agency for Payments and Interventions in Agriculture, in January and February, disbursements were made under the 2017 Campaign, as well as under payment schemes related to market measures, and state subsidies were granted for the reduction of the excise duty on diesel used in agriculture. According to data from the Agency for Funding Rural Investment, in January and February, disbursements to farmers increased year on year.

**Chart 3.8. Credit to the private sector by currency**



**Chart 3.9. Credit to the private sector by institutional sector**



growth in government spending on goods and services – and household deposits<sup>51</sup>. Developments in the latter, along with the slower increase in household income<sup>52</sup> as well as in purchases of non-food items and, to a lesser extent, of motor vehicles and motorcycles, could indicate the beginning of a change in pattern for private consumption. However, the share of time deposits in total household deposits continued to decline in the first two months of the year.

Looking at M3 counterparts, the steeper decline in the annual change in government deposits and the slower pace of increase of credit institutions' long-term financial liabilities had significant expansionary effects in the reported period as a whole.

#### Credit to the private sector

January through February 2018, the annual dynamics of loans to the private sector remained unchanged from 2017 Q4 at 6.5 percent in nominal terms<sup>53</sup> (Chart 3.8), given that new loans made a substantial contribution, slightly on the rise (due to households), while the removal of loans from banks' balance sheets<sup>54</sup> acted towards a slower pace of growth. The breakdown by currency shows that the increase in loans to the private sector was further driven by the leu component (16.3 percent annual average change), whereas the foreign currency component witnessed a stronger contraction. Against this background, the share of leu-denominated loans in total private sector credit continued to widen, reaching a new post-1996 high of 62.9 percent in February.

The breakdown by institutional sector points to opposing developments (Chart 3.9).

Household credit rose at a faster pace<sup>55</sup>, considering that (i) the rate of change of leu-denominated loans stabilised at a high level by post-2008 standards, benefiting from the pick-up in growth of new consumer loans and from the further robust

<sup>51</sup> However, in real terms, both components saw a loss of momentum.

<sup>52</sup> Visible for wage earnings, remittances from abroad and income in the form of social benefits.

<sup>53</sup> While declining in real terms to 1.9 percent from 3.3 percent in the last three months of 2017.

<sup>54</sup> Also as a result of removing two credit institutions which had ceased operations from the aggregate monetary balance sheet in December 2017.

<sup>55</sup> Nevertheless, it decelerated in real terms.

rate of increase of new housing loans, which was, however, relatively slowing down, due, inter alia, to the disruptions in the implementation of the “First Home” programme<sup>56</sup>, and (ii) the decline in the foreign-currency component remained virtually unchanged year on year.

By contrast, the dynamics of credit to non-financial corporations remained on a downtrend, reflecting the further contraction in annual terms in the flow of loans (most likely witnessed by all main business sectors<sup>57</sup>), as well as the effects of the removal of some loans from the aggregate balance sheet of credit institutions. The lei component posted a slacker, albeit still high growth, amid developments in long-term loans, while the pace of change of foreign currency credit stayed deeply in negative territory.

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<sup>56</sup> According to the press release from the National Credit Guarantee Fund for SMEs (FNGCIMM), the new guarantee ceiling for loans under the “First Home” programme was allocated during February.

<sup>57</sup> Based on CCR data.

## 4. Inflation outlook

The annual CPI inflation rate is projected to reach 3.6 percent at the end of 2018, i.e. above the upper bound of the variation band of the target, and 3.0 percent at both the end of 2019 and the forecast horizon (2020 Q1). Having posted a significant leap in the first quarter, this indicator is expected to hover around 5 percent until the end of 2018 Q3. Behind this development stands the fading-out of first-round statistical effects associated with changes to indirect taxation and the scrapping of a number of non-tax fees and charges in early 2017, as well as the impact of recent hikes in administered prices and fuel prices, to which adds the ongoing build-up of inflationary pressures reflected by the adjusted CORE2 index. Starting with 2018 Q4, amid the gradually less accommodative nature of real broad monetary conditions – following the decisions taken by the monetary authority – the annual CPI inflation rate is foreseen to drop, substantially benefiting also from some favourable base effects, attributable to the influence of supply-side shocks in late 2017 and early 2018. Annual core inflation rate is anticipated to stay on the upward trend it had embarked upon in the recent periods, albeit at a less quick pace, given the expected softer action of some of its fundamental drivers. The indicator is forecasted to reach 3.2 percent at the end of 2018 and 3.4 percent at the end of next year. The balance of risks to the annual inflation projection is assessed to be tilted to the upside compared to its path in the baseline scenario, with the sources of risks being associated with the domestic and international environment.

### 1. Baseline scenario

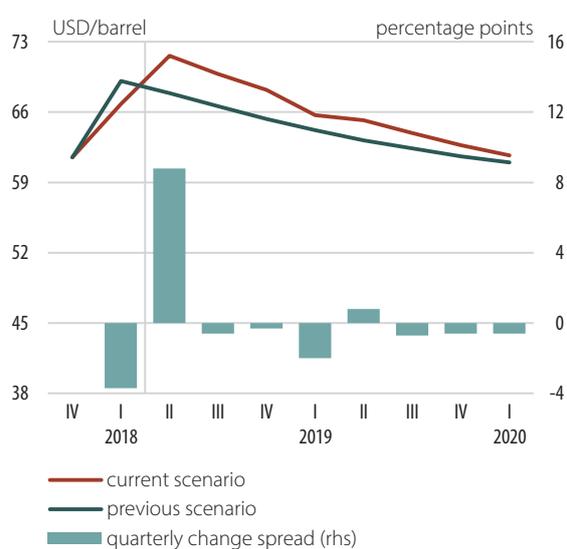
#### 1.1. External assumptions

External demand, assessed based on the effective EU GDP, is seen following a slightly decelerating path, after the significant dynamics recorded in the previous year, but is envisaged to remain above 2 percent (Table 4.1). Among the most notable factors further underpinning the consolidation of economic activity in Romania's trading partners across the euro area are the mix of monetary policy (which is still accommodative) and fiscal policy (deemed to be neutral), the improvements in labour market conditions, albeit at a slower tempo, and the global growth that is foreseen to bolster exports, the stronger euro notwithstanding. The positive gap of the effective EU GDP is expected to run at higher levels than previously projected, amid faster-than-anticipated economic growth recorded of late, reflecting the maturing stage of the cyclical advance in economic activity of foreign partners, with an indirect stimulative impact on the local economy.

**Table 4.1. Expectations on the developments in external variables**

	annual averages	
	2018	2019
Effective EU economic growth (%)	2.5	2.2
Annual inflation rate in the euro area (%)	1.5	1.6
Annual inflation rate in the euro area, excluding energy (%)	1.2	1.6
Annual CPI inflation rate in the USA (%)	2.4	2.1
3M EURIBOR (% per annum)	-0.3	-0.1
USD/EUR exchange rate	1.23	1.25
Brent oil price (USD/barrel)	69.1	64.4

Source: NBR assumptions based on data provided by the European Commission, Consensus Economics and futures prices

**Chart 4.1. Brent oil price scenario**

Source: U.S. Energy Information Administration, NBR assumptions based on Bloomberg data

The average annual HICP inflation rate in the euro area is forecasted to follow an upward course, in the near run driven mainly by rising oil prices, with an impact on energy prices, while over the medium term higher wage costs, as a result of labour market developments, will be the major influencing factor. Against this backdrop, this indicator is expected to come in at 1.5 percent in 2018, whereas the corresponding inflation measure excluding energy is seen reaching 1.2 percent. For 2019, both indicators appear set to post relatively similar values, i.e. 1.6 percent. Compared to the previous *Inflation Report*, the average annual HICP inflation rate excluding energy in the euro area was revised downwards, owing to the developments in the services component. Annual inflation rate in the USA is foreseen to run higher than in the euro area and above the 2 percent benchmark.

Against the background of the ECB's accommodative monetary policy, the nominal 3M EURIBOR rate is anticipated to further register negative values over most of the projection interval.

The euro is envisaged to further appreciate against the US dollar during the first part of the forecast interval, albeit at a slower pace than that recorded since the publication of the previous *Inflation Report*, before stabilising at about EUR/USD 1.25.

The scenario for the developments in the international Brent oil price is based on futures prices and foresees a downtrend during the projection interval, reaching USD 61.7 per barrel

at the forecast horizon (Chart 4.1). The expected movements in the oil price are still uncertainty-ridden, due to both supply-side factors (relating mostly to the November 2017 extension of the agreement between OPEC members and other non-OPEC oil-producing countries to cap oil output, as well as resurgent geopolitical tensions) and demand-side factors (uncertainties about the scale of the pick-up in global economic activity).

## 1.2. Inflation outlook

The baseline scenario of the macroeconomic projection places the annual CPI inflation rate at 3.6 percent at end-2018 and at 3.0 percent at end-2019. These levels are above the upper bound of and inside the  $\pm 1$  percentage point variation band of the 2.5 percent flat target respectively. At the projection horizon, i.e. 2020 Q1,

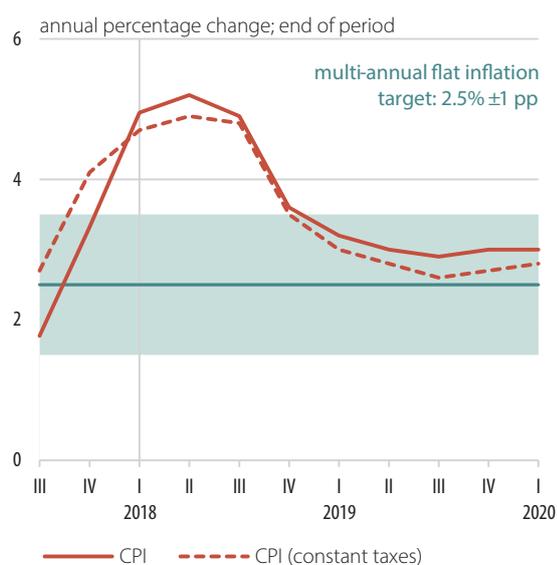
the forecasted rate is seen to stay at 3.0 percent (Table 4.2; Chart 4.2). Having posted a significant leap in 2018 Q1, when it reached 4.95 percent, the annual inflation rate is expected to hover around 5 percent until the end of 2018 Q3. Apart from the fading-out of first-round statistical effects associated with changes to indirect taxation and the scrapping of a number of non-tax fees and charges in early 2017, this owed to the recent sizeable hikes in administered prices and fuel prices, to

**Table 4.2. The annual inflation rate in the baseline scenario**

	annual percentage change; end of period							
	2018			2019				2020
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Central target	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
CPI projection	5.2	4.9	3.6	3.2	3.0	2.9	3.0	3.0
CPI projection*	4.9	4.8	3.5	3.0	2.8	2.6	2.7	2.8

\*) calculated at constant taxes

**Chart 4.2. Inflation forecast**



Source: NIS, NBR projection

**Table 4.3. Annual adjusted CORE2 inflation rate in the baseline scenario**

	annual percentage change; end of period							
	2018			2019				2020
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Adjusted CORE2	3.1	3.1	3.2	3.2	3.3	3.4	3.4	3.5

which added the ongoing build-up of inflationary pressures from fundamental drivers, with an impact on the adjusted CORE2 index dynamics. Under the influence of: (i) a reconfiguration of real broad monetary conditions, which will incorporate with a lag the effect of the monetary authority's decisions, and (ii) the dropping-out from the price index of the impact of considerable supply-side shocks in late 2017<sup>58</sup> and of some price hikes in early 2018<sup>59</sup>, the annual CPI inflation rate is projected to come down more significantly starting in the final quarter of this year.

Compared to the previous *Inflation Report*, the forecasted annual CPI inflation rate has been revised upwards by 0.1 percentage points for the end of 2018, amid a more notable contribution from the dynamics of tobacco product prices and volatile food prices, whereas the growth rate of administered prices was subject only to a marginally more favourable revision. For the end of 2019, the annual CPI inflation rate was revised downwards, also by 0.1 percentage points, given the smaller contributions from all consumer basket components, except tobacco products and alcoholic beverages, which are projected to have an unchanged contribution.

The annual adjusted CORE2 inflation rate is forecasted to remain throughout the projection interval on the uptrend seen last year and early this year, albeit at a less rapid pace, since some of the fundamental drivers are envisaged to exert a softer impact (Table 4.3, Chart 4.3). Domestically, the economic agents' expectations on price developments are seen to be further in favour

<sup>58</sup> The hike in the excise duty on fuels in September and October 2017, hefty increases in some energy components in the administered prices basket, as well as in oil prices.

<sup>59</sup> Occasioned by steeper prices for oil, electricity and natural gas.

of upside adjustments, yet of decreasing intensity over the projection interval. Same-direction effects come also from excess aggregate demand, which is foreseen to stay at elevated levels. The output gap is expected to narrow gradually in the course of next year, given, similarly to the previous projection, the expected reconfiguration of real broad monetary conditions to close-to-neutral values at this horizon. Against this background and amid the fading-out, over the medium term, of the impact of adverse supply-side shocks, inflation expectations are seen easing towards values close to 3 percent at the projection horizon. With inflation rate, excluding energy, in Romania's main trading partners remaining below 2 percent, inflationary pressures from the

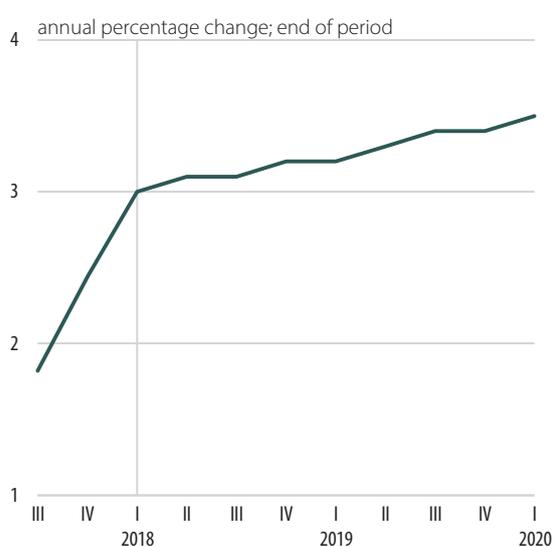
developments anticipated for prices of imported consumer goods are estimated at significantly lower levels than those associated with the domestic environment, yet somewhat rising towards the end of the forecast interval.

Compared to the February 2018 *Inflation Report*, the annual adjusted CORE2 inflation rate was revised downwards by 0.1 percentage points and 0.2 percentage points at end-2018 and end-2019 respectively, amid weaker inflationary pressures from excess demand<sup>60</sup> and import prices<sup>61</sup>, partly countered by stronger inflation expectations over most of the projection interval<sup>62</sup>.

Inflation components beyond the scope of monetary policy, i.e. administered prices, volatile food prices, fuel prices, tobacco product and alcohol beverage prices, are projected to have a cumulated contribution to the annual CPI inflation rate of 1.6 percentage points and 0.9 percentage points at the end of 2018 and 2019 respectively, similarly to the values anticipated in the previous *Inflation Report* (Table 4.4).

The annual dynamics of volatile food (VFE) prices are projected at 6 percent at the end of this year and 3.2 percent at the end of next year, against the backdrop of gradual fading-out of the negative supply-side shock associated with the weak

Chart 4.3. Annual adjusted CORE2 inflation



Source: NIS, NBR projection

Table 4.4. Components' contribution to annual inflation rate\*

	percentage points	
	2018	2019
Administered prices	0.7	0.3
Fuels	0.3	0.1
VFE prices	0.4	0.2
Adjusted CORE2	1.9	2.1
Tobacco and alcoholic beverages	0.2	0.2

\*) end of period; values have been rounded off to one decimal place

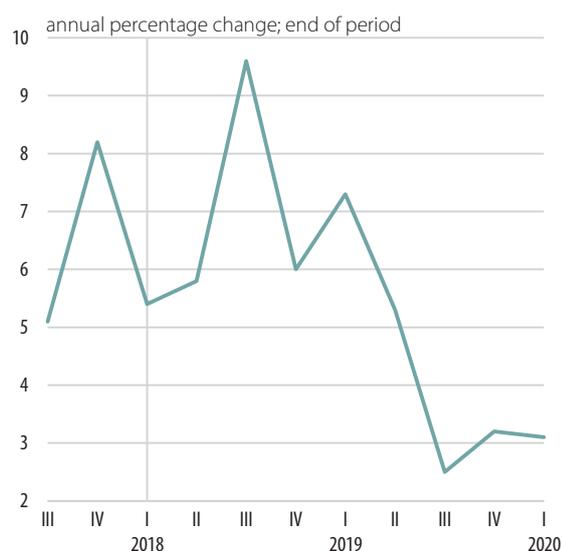
<sup>60</sup> For further details, see Section 1.3. Demand pressures in the current period and over the projection interval, as well as Box 2.

<sup>61</sup> Mainly on account of the downward revision in the forecast of HICP inflation excluding energy in the euro area, considered as the relevant measure for reflecting inflationary pressures associated with the external environment, as it is highly correlated with the adjusted CORE2 inflation rate in Romania and has a large predictive power for the latter. For further details, see Section 1.1. External assumptions.

<sup>62</sup> Given some unfavourable incidental influences that occurred after the release of the previous *Report*, namely the hike in the natural gas price in April 2018 and the softer leu against the euro.

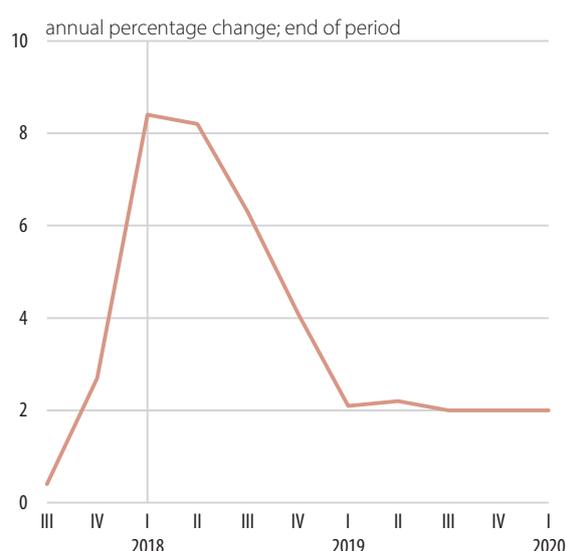
production of eggs at European level at end-2017, together with the assumption regarding normal agricultural years for 2018 and 2019<sup>63</sup>. Compared to the previous *Inflation Report*, the values were revised upwards by 0.7 percentage points for the end of 2018, amid less favourable weather conditions in 2018 Q1, and downwards by 0.1 percentage points for the end of 2019 (Chart 4.4).

Chart 4.4. VFE prices annual inflation



Source: NIS, NBR projection

Chart 4.5. Administered prices annual inflation



Source: NIS, NBR projection

According to the exogenous scenario for administered prices, their growth rate is anticipated at 4.1 percent and 2 percent at the end of 2018 and 2019 respectively (Chart 4.5). Compared to the previous forecasting round, the levels were revised marginally, i.e. downwards by 0.1 percentage points for this year-end and upwards by 0.1 percentage points for the next. The projected path is marked by hikes in natural gas and electricity prices performed at the beginning of this year and by the increase envisaged for April<sup>64</sup>, as well as by the revised weights within this group<sup>65</sup>.

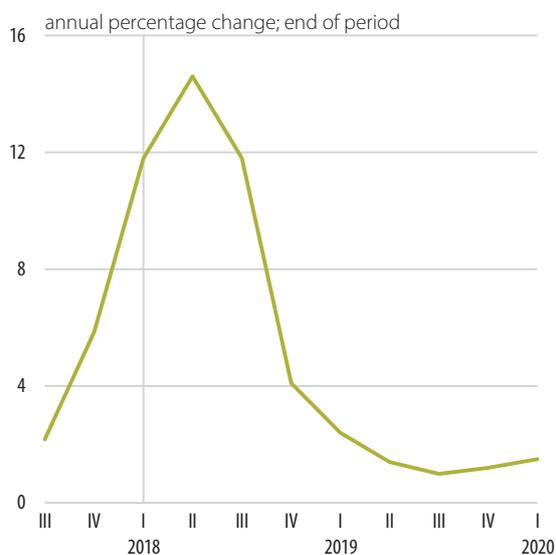
The annual dynamics of fuel prices are projected at 4.1 percent at end-2018 and 1.2 percent at end-2019 (Chart 4.6). The projected path is marked by the fading-out of the first-round effect associated with the two-step increase in excise duties (on 15 September and 1 October 2017) and by the fast annual growth rates expected for the Brent oil price during the first part of the projection interval, followed by

<sup>63</sup> In the absence of any other relevant information, the standard assumption envisages a normal farming year, close to the average multi-annual agricultural output.

<sup>64</sup> Following the meeting of 29 March 2018, the Regulatory Committee of the Romanian Energy Regulatory Authority decided, in the case of ENGIE Romania, to approve the raise in the natural gas price for regulated supply to household end-users. For further details, see the Romanian Energy Regulatory Authority press release of 29 March 2018 available at: <http://www.anre.ro/ro/presa/comunicate/comunicat-29-03-2018-preturi-furnizare-reglementata-gaze-naturale> (Romanian only).

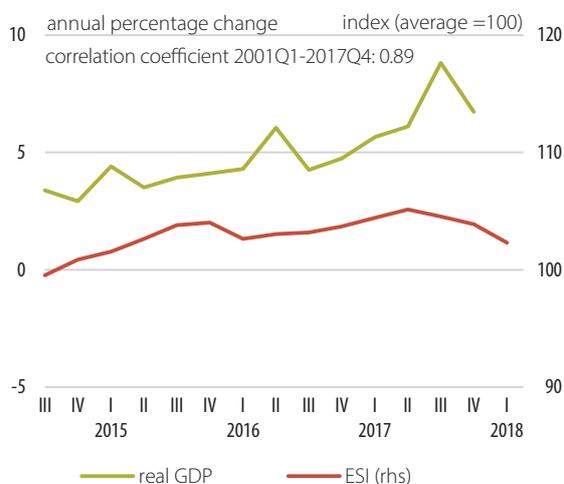
<sup>65</sup> Starting with this projection round, the weights used for the consumer basket components (published by the NIS in February 2018, subsequently to the release of the previous *Inflation Report*) are calculated based on the average monthly expenditure per household, as it arises from the *Household Budget Survey* for 2016. Compared to the former weights, the new ones reflect larger contributions from "electricity" and "natural gas" in the administered prices basket. At the same time, administered prices hold a smaller weight in the consumer basket, while the weight of goods and services included in the adjusted CORE2 index is larger.

Chart 4.6. Fuel prices annual inflation



Source: NIS, NBR projection

Chart 4.7. Economic sentiment indicator\* and economic growth



\*) seasonally adjusted data

Source: NIS, EC-DG ECFIN

negative annual rates for the rest of the interval. In 2018, the annual dynamics are marginally higher (by 0.1 percentage points) than those projected in the previous *Report*, amid faster forecasted annual growth of the oil price and stronger inflation expectations, only partly countered by a more substantial anticipated appreciation of the leu versus the US dollar. For next year, the dynamics were revised downwards by 0.3 percentage points, particularly on the back of forecasting slower annual rates of change of the oil price.

The path of the annual inflation rate projected for tobacco products and alcoholic beverages is shaped by the pieces of legislation setting the levels of excise duties on such goods, being expected to stand at 2.6 percent at end-2018 and 3.1 percent at end-2019 (Chart 4.7). For this year, the dynamics are 1.3 percentage point higher than those projected in the previous round, in the context of sharper April hikes, larger than those which would have stemmed strictly from the 2 percent increase in excise duties levied on tobacco products (up to lei 449 per 1,000 cigarettes).

### 1.3. Demand pressures in the current period and over the projection interval<sup>66</sup>

#### Output gap

In 2017 Q4, real GDP rose by 0.5 percent versus the previous quarter and by 6.7 percent compared to the same year-ago period<sup>67</sup>. Economic growth reached 6.9 percent in 2017 as a whole. Looking at the breakdown, the quarterly dynamics reflected the favourable contributions of final consumption and gross fixed capital formation (GFCF), while net exports had a negative contribution. Quarterly

GDP growth decelerated mainly due to an effect associated with the exceptional agricultural output of 2017 Q3. Leaving aside this effect, the prospects for the first two quarters of the current year indicate a further deceleration in GDP dynamics. This forecast is based on a series of signals coming from monthly indicators. In particular, industrial production and the retail trade turnover volume declined, along with a drop in the economic sentiment indicator, notably in the case of

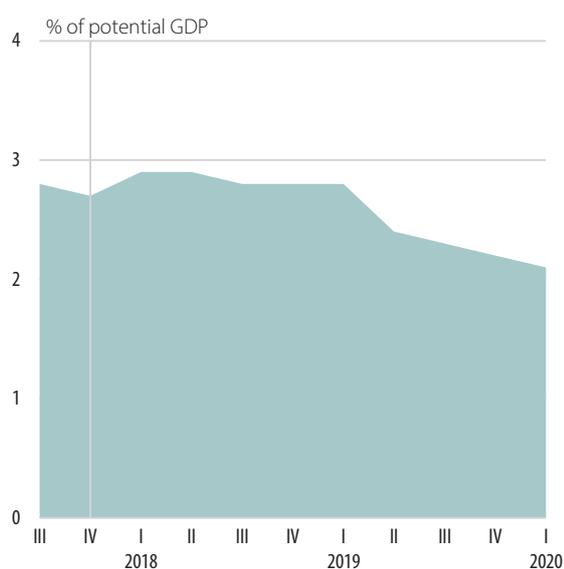
<sup>66</sup> Unless otherwise indicated, percentage changes are calculated based on seasonally adjusted data series. Source: NBR, MPF, NIS, Eurostat, EC-DG ECFIN and Reuters.

<sup>67</sup> NIS Press Release No. 84 of 5 April 2018. The annual dynamics are calculated based on gross data series.

industry and consumer sub-components – Chart 4.7<sup>68</sup>. Quarterly GDP growth will continue to be driven by domestic demand, while the contribution of net exports of goods and services will remain negative.

The potential GDP dynamics are assessed to gradually accelerate throughout the projection interval, reflecting positive contributions from all production factors. The capital stock benefits from favourable recent and forecasted developments in GFCF. Labour will further make a slightly positive contribution, given the anticipated increase in the activity rate (associated with the growth in economic activity), partly offset by the downward trend in working-age population. Over the entire forecast interval, the TFP trend contribution captures the expectations on additional efficiency gains from the use of both labour and capital, reflecting the new investment in equipment (which is usually high-tech and requires adapting workforce skills), as well as the expected improvement in the absorption of EU structural and investment

Chart 4.8. Output gap



Source: NBR assessments based on data provided by the NIS

funds. Persistent adverse influences can be attributed to the modest allocation of resources for innovation<sup>69</sup> and the poor quality of infrastructure that affects both labour mobility and decisions on the location of new productive capacities.

The output gap (Chart 4.8), which widened throughout 2017<sup>70</sup>, is expected to stay at relatively similar values in 2018, before narrowing during 2019. The magnitude and dynamics of excess demand mirror: (i) the impact of the discretionary component of fiscal and income policy measures, projected to diminish more visibly in 2019; (ii) the gradual abatement of the stimulative nature of real broad monetary conditions to close-to-neutral values in the course of 2019; (iii) the decelerating dynamics of households' real disposable income starting with 2018; and (iv) the advance of the external demand gap into positive territory. As compared to the previous *Inflation Report*, the domestic output

gap for 2017 was revised to lower levels, with similar implications over the projection interval as well. The output gap reassessment was the result of: (i) the revision of the historical data series for seasonally adjusted real GDP and of the near-term forecasting error; (ii) the upward revision of the impact of agriculture in 2017, coming especially from 2017 Q3<sup>71</sup>; and (iii) the updating of information comprised in the set

<sup>68</sup> Compared to the average of 2017 Q4, in January-February 2018, industrial production decreased by 0.7 percent, while the retail trade turnover volume (excluding motor vehicles and motorcycles) declined by 1.1 percent. The economic sentiment indicator went down 1.6 points in 2018 Q1 compared to a quarter earlier, while still standing above its historical average.

<sup>69</sup> European Commission, *European Innovation Scoreboard* (2017).

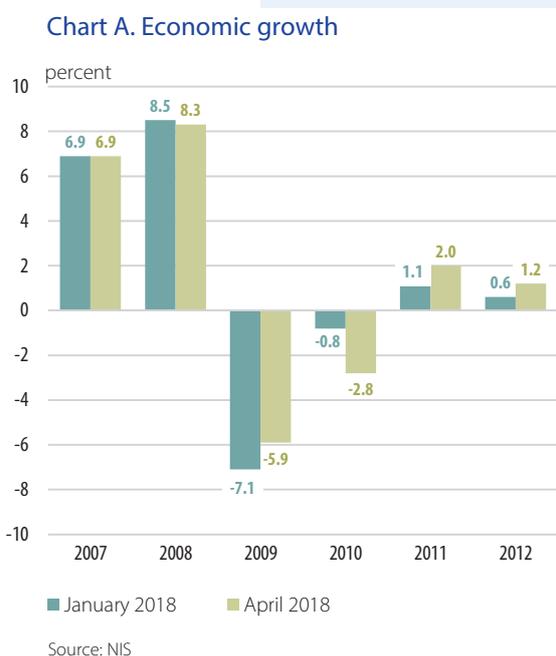
<sup>70</sup> Corroborative evidence on the cyclical position of the economy is brought by a broad set of indicators that point to a strengthening of overheating signals (in 2017 Q4 versus the previous quarter) or their remaining at least at a moderate level. For details on the set of variables under review, see Box 5 in the November 2017 *Inflation Report*.

<sup>71</sup> Within the output gap assessment, the exceptional agricultural output is assumed to have no impact on the inflationary pressures in the economy, and hence its effect is excluded from the output gap assessment.

of determining variables. For details on the revision of the real GDP historical data series and the output gap reassessment see Box 2. From the perspective of aggregate demand components, the output gap path is shaped by the developments in the gap of actual individual consumption of households and, to a lesser degree, by those in the GFCF gap. In turn, the gaps of exports and imports of goods and services are assessed at positive values, yet further having a negative net contribution to the output gap. The assessment of the output gap and of the gaps of GDP components is surrounded by a degree of uncertainty mirroring, inter alia, the frequency and size of the revisions of historical series and also their relatively high volatility.

The baseline scenario of the projection shows economic growth to slow down progressively throughout 2018 and 2019, inter alia amid a gradual abatement in the stimulative nature of real broad monetary conditions to close-to-neutral values in the course of 2019 and a lower impact of the discretionary component of fiscal and income policy (i.e. the fiscal impulse). The dynamics of economic growth over the projection interval reflect domestic demand developments, while the contribution of net exports remains negative.

### Box 2. Re-assessing output gap following the revision of the historical GDP series



The output gap is a synthetic measure of the gap between aggregate demand and supply in the economy, assessed as the difference between actual GDP (reflecting short-term developments in aggregate demand) and potential GDP (showing long-term developments in aggregate supply)<sup>72</sup>. The output gap estimation is directly influenced by developments in the statistical data series, a pivotal role being attributed to the dynamics of the seasonally adjusted real GDP.

With the publication of the flash estimates on GDP dynamics in 2017 Q4<sup>73</sup>, the NIS announced that the seasonally adjusted quarterly GDP series had been recalculated. Based on the information made available by the NIS release, GDP and its related components had been recalculated in the context of:

- the revision of unadjusted quarterly GDP series for 2007–2012 with a view to reconciling them with the revised annual data to reflect the implementation of the methodological changes on the treatment of Eurostat reservations regarding the gross national income;

<sup>72</sup> For details on the output gap definition and the estimation methods employed by the NBR, see Box “Output gap: definition and estimation methods” in the NBR *Annual Report 2016* and article “Evaluarea deviației PIB în cadrul BNR” (<http://www.opiniibnr.ro/index.php/macroconomie/271-evaluarea-deviatiei-pib-in-cadrul-bnr>).

<sup>73</sup> NIS Press Release No. 44 of 14 February 2018.

Chart B. Quarterly GDP growth



\*) For January 2018 data, 2017 Q4 shows the short-term forecast used in the previous round.

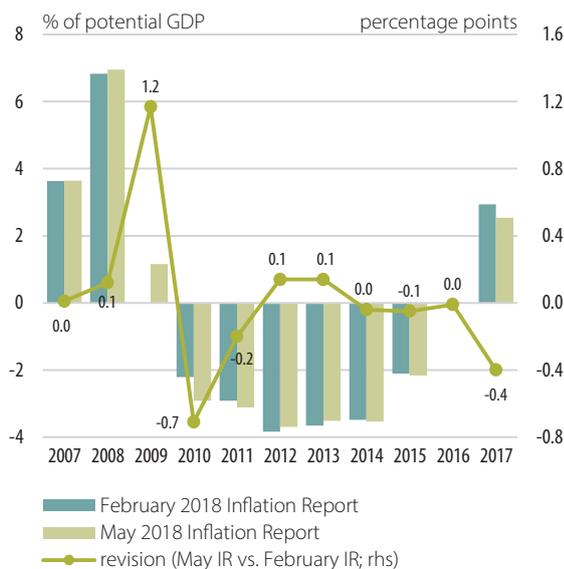
Source: NIS, NBR

- the revision of unadjusted quarterly GDP series for 2015-2016 with a view to reconciling them with the annual data (2015 – final version, 2016 – semi-final version);
- the incorporation of estimates for 2017 Q4.

Chart A shows the annual economic growth for 2007-2012 based on the data released in January 2018<sup>74</sup>, featured in the baseline scenario in the February 2018 *Inflation Report*, and on the data released in April 2018<sup>75</sup>, featured in the present *Report*. Recent data show that the economic contraction recorded in 2009 was slightly lower, while during 2010, GDP posted a steeper decline. Subsequently, in 2011 and 2012, economic growth was higher, being revised at rates almost double the previously reported values.

The changes made to the unadjusted GDP series reflected also in revisions of the seasonally adjusted series, of which the most relevant for the current output gap assessment occurred in the course of 2017 (Chart B). The systematic downward revisions of the GDP dynamics in the first three quarters of 2017 added to a slight overestimation of the dynamics for 2017 Q4 in the previous round, following, inter alia, more favourable previous historical data.

Chart C. Output gap



Source: NBR assessments based on data provided by the NIS

Chart C shows the output gap re-assessment compared to the previous forecasting round for 2007-2017. The revisions made to the seasonally adjusted real GDP series generally reflected also in the output gap re-assessment. For 2011-2013, the economic growth revision was largely incorporated into potential GDP growth, given that, looking at GDP components, GFCF made a more favourable contribution, also reflected in a higher capital stock. Compared to the previous round, for 2017, output gap was revised downwards by 0.4 percentage points (from 2.9 percent to 2.5 percent). The re-assessment of the output gap is based on: (i) the revision of the historical series and the forecast error in the previous round, accounting for about one quarter of the total revision; (ii) the reconsidered size of the bumper crop effect that occurred

<sup>74</sup> NIS Press Release No. 16 of 12 January 2018.

<sup>75</sup> NIS Press Release No. 84 of 5 April 2018.

mainly in 2017 Q3, amounting to around 0.2 percentage points and (iii) the impact of updating the other drivers. The downward revision of the output gap during the historical interval leads to a downward revision of the projected output gap too.

Considering the unobservable nature of the output gap, its estimation, especially in real time and in the context of the frequent revisions of the primary data series, features a high degree of uncertainty and is inherently likely to undergo subsequent revisions<sup>76</sup>.

### Aggregate demand components

In 2017 Q4, the quarterly dynamics of actual final consumption posted a significant slowdown compared to the previous quarter (0.3 percent versus 4.4 percent)<sup>77</sup>. However, over 2017 as a whole, the average annual growth of this component saw a new pick-up, reaching 8.4 percent. Leaving aside the unfavourable impact of agricultural output in 2017 Q4, the outlook for the first two quarters of the current year shows a deceleration in the growth rate of actual final consumption. Signals in this respect are given by the developments in retail trade excluding motor vehicles and motorcycles, alongside a worsening in the consumer confidence indicator<sup>78</sup> during 2018 Q1 against the previous period, on account of the sub-components regarding expectations on the general economic context, financial situation and developments in savings.

The actual final consumption is expected to remain the key driver of economic growth over the entire projection interval, despite a slower annual growth compared to that recorded in 2017. This mirrors the expected sharp slowdown in the dynamics of households' real disposable income starting with 2018, given the anticipated deceleration in nominal net wage growth (relative to the brisk increase in 2017), to which adds the forecasted path of the annual CPI inflation rate. Although on the wane, the growth rate of nominal net wage will remain robust amid the relative persistence of tight labour market conditions.

The quarterly GFCF dynamics stepped up in 2017 Q4 (3.5 percent versus 2.1 percent in the previous quarter), while the average annual growth reverted to positive territory in 2017. GFCF growth is projected to see a slight slowdown in 2018 Q1 and remain unchanged in Q2, amid the rebound in non-residential and civil engineering construction works<sup>79</sup> (under the impact of an expected pick-up in the capital expenditure of general government), on the one hand, and the loss of momentum of the industrial output of capital goods and the further decline in residential construction works, on the other hand.

<sup>76</sup> See NBR *Occasional Paper* No. 15/2015, "Modelling Statistical Data Uncertainty in the Context of Historical Revisions" for a quantitative assessment of the uncertainty surrounding the historical revisions of the quarterly growth of real GDP.

<sup>77</sup> For details on drivers of GDP components in 2017 Q4, see Chapter 2, Section 1. Demand and supply.

<sup>78</sup> It fell by 3.1 points, staying on a downward trend.

<sup>79</sup> Compared to the 2017 Q4 average, in January-February 2018, construction works for non-residential buildings increased by 18 percent and civil engineering works rose by 26 percent, also on the background of a further high confidence indicator in the construction sector.

During 2018-2019, the average annual GFCF growth is foreseen to remain positive, benefiting from the gradual rise in foreign direct investment inflows – supported by the expected economic growth in Romania and in the main countries of origin –, as well as from the improved absorption of structural and investment funds<sup>80</sup>. The developments in this component are further affected by a number of factors such as the predictability of the legislative framework, the volume of general government investment, the lack or poor quality of infrastructure, as well as the shortage of skilled workforce meeting employers' requirements<sup>81</sup>, all of which increase the uncertainty of the GFCF forecast<sup>82</sup>.

In 2017 Q4, the exports of goods and services further recorded quarterly dynamics of 1.7 percent, resulting in a slightly stronger average annual growth throughout 2017 (9.7 percent versus 8.7 percent in the previous year).

Over the projection interval, exports of goods and services will register robust growth rates, albeit slower compared to the previous years. On the one hand, the advance in exports of goods and services will be supported by favourable developments in the economies of main trading partners and also by the sales of sectors integrated in global value chains (such as the manufacture of transport equipment and related sub-sectors). On the other hand, the deceleration in annual dynamics takes into account the worsening in price competitiveness of local products, amid the increase in unit labour costs, which will also affect production costs and, implicitly, prices in the economy, with an appreciation impact on the real effective exchange rate that will add to the restrictive influence of the above-mentioned factors. The slowdown in the growth rate of exports of goods and services is also determined by a series of dragging structural features of the economy, such as the lack or poor quality of infrastructure or the value added generated by production processes, in the context of a still low innovation level<sup>83</sup>.

Amid the advance in domestic absorption and the favourable developments in exports, imports of goods and services recorded a faster pace of increase both in 2017 Q4 (2.9 percent against the previous quarter) and in 2017 as a whole (average rate of 11.3 percent compared to 9.8 percent in 2016). In accordance with the developments in domestic absorption, the growth rate of imports of goods and services is forecasted to gradually decelerate, while still exceeding that of exports throughout the entire projection interval. Against this background, net

<sup>80</sup> Taking into consideration the frequent legislative changes which enable a smoother implementation of projects included in operational programmes, the framework agreement worth EUR 1 billion, signed in July 2017 between Romania and the European Investment Bank, for co-financing priority transport projects, as well as the completion by March 2019 of phased projects under the current financial allocation (not completed during the previous financial framework and cumulating approximately EUR 4 billion).

<sup>81</sup> In what demand and supply are concerned, the percentage of working-age population with medium and high level education is lower than that of employed population (actually required by employers), while the situation is reversed in the case of low-level education. Similarly, the percentage of active population with high-level education is greater than that corresponding to the unemployed persons. Moreover, digital skills of the working population in Romania are assessed as being among the lowest in the EU, according to the *Community Survey on ICT usage by households and individuals*.

<sup>82</sup> In fact, this is one of the GDP components that recorded steep revisions of the historical data series published by the NIS.

<sup>83</sup> Nevertheless, in sectors such as the automotive industry, there are optimistic expectations regarding external demand developments, amid car manufacturers releasing new models or opening new production facilities in countries in the region, which may translate into a higher number of orders to local suppliers.

exports are anticipated to make a negative contribution to GDP growth over the projection interval, which will increase in 2018 and will then gradually diminish starting with 2019.

The balance-of-payments current account deficit continued its widening trend throughout 2017<sup>84</sup>, primarily due to the larger deficit on trade in goods. Over the projection interval, the external deficit is anticipated to continue to expand, posting values slightly below 4 percent of GDP in the medium term. At the same time, despite the decrease in the stable, non-debt-creating capital flows<sup>85</sup> in 2017, the current account deficit is expected to be fully covered by these flows. The assessment is based on the assumption of a gradual rebound of foreign direct investment inflows and of improved absorption of structural and investment funds, given the emerging conditions favouring an accelerated implementation of the projects financed from these sources. Nevertheless, the widening of the current account deficit due to accelerating consumption acts towards a further deterioration of macroeconomic equilibria, with a direct impact on capital flows to the local economy, particularly as the sign of and developments in Romania's current account balance are divergent (deficit versus surplus, widening against narrowing, respectively) relative to those recorded by the other emerging economies in the region (i.e. Hungary, Poland, the Czech Republic, Bulgaria, Croatia).

#### Broad monetary conditions

Broad monetary conditions capture the impact exerted on future developments in aggregate demand by the real interest rates applied by credit institutions on leu- and foreign currency-denominated loans and deposits of non-bank clients and by the real effective exchange rate<sup>86</sup> of the leu. The exchange rate exerts its influence via the net export channel, as well as via the effects on wealth and balance sheets of economic agents<sup>87</sup>.

Both the average nominal interest rate on new loans in lei and that on new time deposits in lei are expected to pick up in 2018 Q1 and Q2, reflecting the functioning of the monetary policy transmission mechanism, in the context of the recent monetary policy rate hikes. However, in real terms, these interest rates are expected to continue their downward path in 2018 Q1 as well, against the background of a larger increase in expected inflation than in nominal rates. In 2018 Q2, the real interest rates are assessed to be on the rise, due to the prevailing impact of increases in nominal terms. Thus, for the aforementioned quarters, the real interest rates continue to exert a cumulated stimulative impact on the economic activity in the periods ahead, albeit on the wane starting with 2018 Q2.

<sup>84</sup> As a share in GDP, it stood at 3.4 percent at end 2017, posting an increase of about 1.3 percentage points against the previous year.

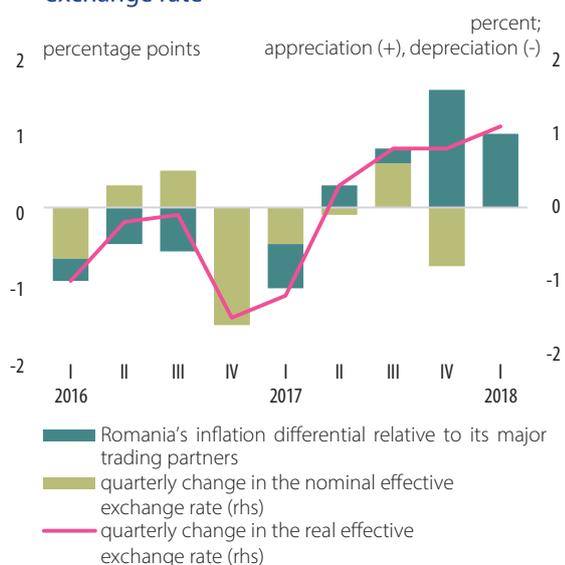
<sup>85</sup> The equity component of foreign direct investment and the capital transfers associated with EU structural and investment funds, whose cumulated share in GDP is projected to remain small compared to the 2013-2016 period.

<sup>86</sup> The relevant exchange rate for the NBR's macroeconomic model for analysis and medium-term forecasting relies on the EUR/RON and USD/RON exchange rates, with the weighting system mirroring the weights of the two currencies in Romania's foreign trade.

<sup>87</sup> The relevance of this channel has declined gradually in recent periods, given the narrowing of the share of foreign currency-denominated loans in total credit to the private sector, amid the faster rise in leu-denominated flows versus those in foreign currency.

In 2018 Q1, the domestic currency witnessed relatively stable developments in nominal effective terms, its depreciation against the euro being offset by its appreciation against the US dollar. In the same period, the domestic currency is assessed to have remained on an appreciation trend in real effective terms (Chart 4.9),

**Chart 4.9. Quarterly change in the effective exchange rate**



Source: Eurostat, U.S. Bureau of Labor Statistics, NBR, NBR calculations

mainly as a result of the higher domestic inflation rate than those reported by Romania's trading partners. Against this background, in 2018 Q1 the real effective exchange rate is estimated to have a relatively neutral impact on the economic activity in the periods ahead via the net export channel.

The wealth and balance sheet effect captures the costs expressed in lei of foreign currency-denominated loans and is assessed to be further low in 2018 Q1 and Q2, exerting a favourable impact on future aggregate demand. The assessment is mainly based on the real foreign interest rate (3M EURIBOR) remaining in negative territory, given the ECB's accommodative monetary policy. To this add the expected appreciation of the domestic currency in real effective terms and the relatively low levels of the sovereign risk premium from a historical perspective.

Overall, in 2018 Q1 and Q2, real broad monetary conditions are assessed to continue to exert a stimulative impact, albeit decreasing, on the aggregate demand in the following periods, on the back of all components' contribution. The gradual abatement trend of the stimulative nature of real broad monetary conditions is anticipated to continue throughout the projection interval, the indicator being projected to record close-to-neutral values starting with 2019. The appreciation of the real effective exchange rate is expected to be the main determinant of these developments, given the annual domestic inflation rate exceeding those reported by Romania's trading partners. An additional contribution in the same direction will make the real interest rates on new loans and new time deposits, as well as the wealth and balance sheet effect. The NBR's monetary policy stance is shaped with a view to ensuring and maintaining price stability over the medium term in a manner conducive to achieving sustainable economic growth and preserving macroeconomic stability.

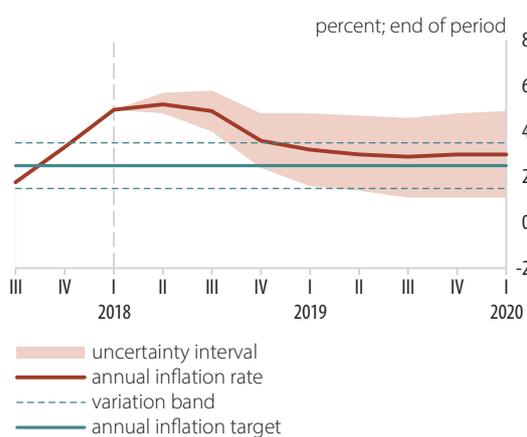
#### 1.4. Risks associated with the projection

The balance of risks to the annual CPI inflation rate projection is assessed as being tilted to the upside compared to the path in the baseline scenario (Chart 4.10), with risks stemming from both the domestic and external environment.

Domestically, the risks causing the projected inflation rate to post upside deviations arise mostly from the high degree of labour market tightness, which may additionally foster excess aggregate demand. Moreover, unless the pick-up

in the costs of companies is accompanied by an increased efficiency of the production process, additional inflationary pressures would be generated by a widening of the wage-productivity gap, inter alia, in the context of persistent structural deficiencies of labour market in Romania (pronounced mismatch between

Chart 4.10. Uncertainty interval associated with inflation projection in the baseline scenario



Note: The uncertainty interval was calculated based on the annual CPI inflation forecast errors in the NBR projections during 2005-2017. The magnitude of forecast errors is positively correlated with the time horizon they refer to.

Source: NIS, NBR calculations and projections

the available workforce skills and the requirements of employers, contained labour mobility, etc.). At the same time, if the expansion of consumption continued to be increasingly covered by imports of goods rather than by domestically-produced goods, the external imbalance could widen, with adverse consequences on the composition of capital flows to the Romanian economy, especially in the context of the anticipated dynamics of the current account deficit in Romania diverging further from those expected in the other emerging economies in the region.

The risks associated with the fiscal and income policy stance are assessed as being balanced, given that an important part of the measures envisaged for the current year have already been implemented and have started to yield effects, reflected also in the budget execution. However, since the deficit target announced by the authorities nears 3 percent

of GDP<sup>88</sup>, any deviation from this value remains a reason for concern, especially those deviations that would involve a budgetary underperformance, in light of the compensatory measures that would become imperative. In the same perspective, it is desirable to preserve a balance between the fiscal and income measures aimed at stimulating aggregate demand and the measures meant to enhance the economy's productive capacity in order to avoid the build-up of additional economy-wide inflationary pressures and the fuelling of the output gap, which would lead to further departures from fulfilling the structural deficit objective<sup>89</sup>.

From a broader perspective, the consistent implementation of a balanced macroeconomic policy mix is called for, as it is deemed essential to ensure lasting and sustainable economic growth, without prejudice to the objective of price stability. At this juncture, stronger efforts to absorb EU structural and investment funds are seen as essential for the Romanian economy to bridge functional and infrastructure gaps.

Global developments continue to be a sizeable source of risks to external demand developments in the baseline scenario. On the one hand, stronger global economic growth, also in the context of the fiscal stimulus implemented by the

<sup>88</sup> The maximum ceiling set forth by the Stability and Growth Pact – deemed as a reference value for identifying and correcting budget slippages.

<sup>89</sup> The structural balance is defined as a budget balance measure that would have prevailed in the absence of the influences of the business cycle, serving as an indicator for defining the medium-term budget objective. According to it, the structural deficit should run below 1 percent of GDP.

US Administration<sup>90</sup>, might give another boost to investment and international trade. On the other hand, increased trade protectionism and a possible tightening of global financial conditions, amid the monetary policy stances pursued by the major central banks, might generate opposite effects. Against this background, the developments relating to Brexit continue to be highly relevant, their monitoring focusing on the potential consequences on the global macroeconomic coordinates, in an environment marked by heightening geopolitical tensions.

At the same time, the persistence for a longer time of low inflation in the euro area and in other EU countries, in spite of a robust economic expansion, could lead to downward deviations of the forecasted inflation rate from the path in the baseline scenario, in the context of an ongoing increase in trade integration with the EU.

Relatively balanced risks to inflation, conditional upon the information available so far, stem from administered prices. The uncertainties about the impact of the natural gas and electricity market liberalisation on end-user prices remain, however, relevant.

Volatile food price developments are surrounded by inherent uncertainties arising from weather conditions that carry the potential to influence the agricultural produce supply in both ways.

A risk factor that has become more relevant in the current round refers to the international commodity prices, especially energy prices, in the context of the recent developments in crude oil prices and of their increased volatility over the last year. Looking ahead, there are influences that may put upward pressures on the oil barrel price, associated, on the one hand, with the likely declines in supply worldwide (in the context of the agreement between OPEC members and some non-OPEC oil producers and amid the deterioration in the production capacity in Venezuela) and, on the other hand, with the upturn in the global economic activity.

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<sup>90</sup> This refers mainly to the corporate income tax cut and to the full tax deduction, ever since the first year, of eligible investments.

# Abbreviations

CCR	Central Credit Register
CPI	consumer price index
DG ECFIN	Directorate General for Economic and Financial Affairs
EC	European Commission
ECB	European Central Bank
EIB	European Investment Bank
ESI	Economic Sentiment Indicator
EU	European Union
Eurostat	Statistical Office of the European Union
FAO	Food and Agricultural Organization of the United Nations
FOMC	Federal Open Market Committee
GDP	gross domestic product
GFCF	gross fixed capital formation
HICP	harmonised index of consumer prices
ILO	International Labour Office
IMF	International Monetary Fund
MPF	Ministry of Public Finance
NBR	National Bank of Romania
NIS	National Institute of Statistics
OPEC	Organisation of the Petroleum Exporting Countries
PMI	Purchasing Managers' Index
ROBOR	Romanian Interbank Offer Rate
TFP	total factor productivity
VAT	value added tax
VFE	vegetables, fruit, eggs

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